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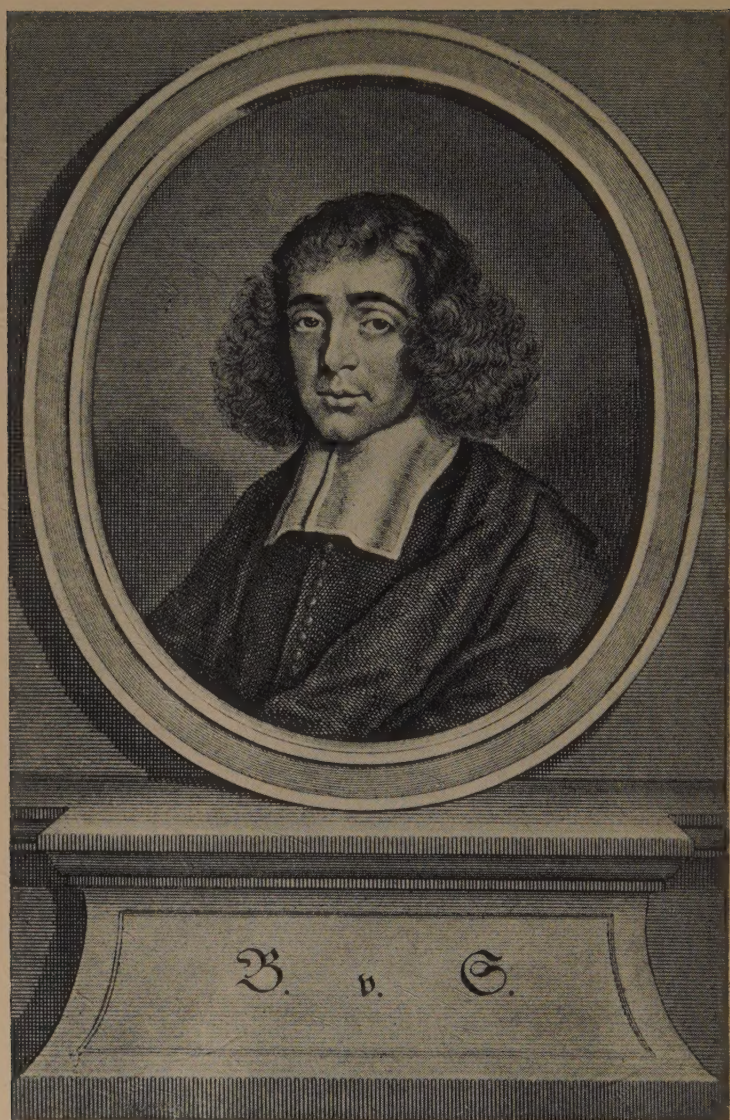
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BENEDICT SPINOZA

THE PHILOSOPHY OF SPINOZA

The Unity of His Thought

BY

RICHARD McKEON

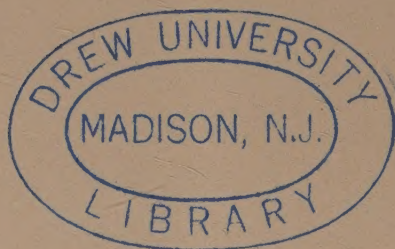
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THE PHILOSOPHY OF SPINOZA

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To
FREDERICK J. E. WOODBRIDGE

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PREFACE

THE history of thought encounters in interpretation dangers peculiar to it among historical disciplines; one need not be a philosopher to recognize that the retelling of a man's philosophy must express still another philosophy, and must run the danger thus, despite what philosophic truths it may contain, of historical falsifications. There is no avoiding the danger, unless it is preferable, as some scholastics were convinced, that the study of the history of philosophy be directed to the discovery, not of what a man said, but of the Truth; perhaps great philosophers and seekers after truth have been led by their divergent systems and terminologies to express in varying forms insights into a truth which is, for all that, at bottom one. In any case, questions of interpretation present the alternative: they may be answered in terms either of history or philosophy.

Where interpretations are many and extremely diverse, as they are in the case of the philosophy of Spinoza, it is a needless presumption to insist on the exclusive authenticity of any one reading. The meaning and the illumination of a doctrine frequently can be conveyed by translations of it into terms which, though mutually exclusive or even contradictory, are intelligent developments of its thought. To insist on the total error of an interpretation is more usually a development from a theory of meaning than a conclusion consequent to research; historical criticism of doctrines is a hazardous enterprise, feasible when it is limited to specific points, and then care must be taken that it be well-documented; but if it chooses to be general, its justification should be philosophic. In the latter sense the minute study of one philosopher, of Aristotle, Spinoza, Aquinas, or any one of a half dozen others, is the best introduction, not only to the history of philosophy, but to philosophy itself. The presence of such convictions as these in the exposition which

follows marks the indebtedness which, even more than the formal inscription of it to him, dedicates this book to Dean Woodbridge: the writing of the book was undertaken as a result of discussions and conversations with him, and the sense and spirit of the project are his, though he would differ still with many of the ideas and emphases. But consistent with the philosophic purposes which were clear in discussion, even when there were differences in doctrine, this presentation of the philosophy of Spinoza is directed chiefly to express the issues involved in the spinozistic system: where a decision is necessary for one interpretation rather than another, the question is of course historical, and historical evidence is presented as fully as possible: but the major motivation is in following the implications of the philosophy of Spinoza, which for its philosophic aptness — and because so little of it is present in contemporary discussions — deserves to be explored again.

I am greatly indebted to Mr. Irwin L. Langbein for his patient assistance in reading proofs and verifying references.

RICHARD MCKEON.

COLUMBIA UNIVERSITY
NEW YORK CITY
July 1928

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PART ONE

THE BEGINNINGS OF SPINOZA'S
THOUGHT

THE PHILOSOPHY OF SPINOZA

INTRODUCTION

THE two and a half centuries which have passed since the death of Spinoza have been prolific in criticism of his work. Much that has been written about him, to be sure, seems to have sprung from no more profound motivation than a wish to praise or defame, but even of serious commentary few philosophers besides Aristotle can boast a larger critical library. Other details, moreover, of Spinoza's philosophic fortune suggest the comparison of Aristotle: even if one were permitted to forget that he has been rediscovered after a comparative oblivion, one would be led by the fervor with which he is acclaimed to expect a scholasticism in modern philosophy of which he is the Philosopher. Usually when he is not passed by or execrated in philosophic writings, he is looked to for a model of logical precision and acumen, and his pervasive awareness of the implications of concepts has apotheosized him among metaphysicians. Under such circumstances there is the danger that any further work seem a trifling or a presumptuous addition—either the swelling of the scholasticism with another glossary and commentary, or the undertaking of the magical enterprise of detailing precisely what has been in these works for several centuries. Fortunately the alternative is not exhaustive, and fortunately, so far as it holds, one may guide oneself by erring a little on the side of presumption. But the situation is determined somewhat by circumstances other than only these: the passing of centuries has altered the materials of the problem; it has added questions, and at very least it has changed the approach and so has changed the problem too. An age which boasts, as the present age does, of its scientific, pragmatic, and positivistic attitudes may well have lost, in forming itself, the sense of a philosophy which saw the

possibility of those postures and avoided them. The intellectualist predilections which are evinced through the whole deductive length of Spinoza's system molds it as no subsequent philosophy could be molded. It would be difficult to ignore the consistent unity of purpose which emerges in any analysis of it, and that unity seems to lay bare in turn a metaphysical unity evolved and expounded in a fortified deductive logic. The suspicion suggests itself, even at the outset, that the very fact of unity recurs, not as an accident of presentation, but as the solution of ethical, methodological and metaphysical problems. If, therefore, Spinoza is to be read for the body of doctrine which the history of philosophy has attached to his name, it may not be without use to philosophy and to the history of philosophy to inquire into the meaning of this persistent striving.

Excellent reasons could be found, consequently, for adding one more to the large collection of books on Spinoza. After so much criticism it can not be a question merely of approaching a work critically; the work must be seen through the confusions and clarifications of two hundred and fifty years. If it seem profitable to study the unity of Spinoza's thought, it is not merely because there are signs of unity in his work, but further because his critics have found such an amazing diversity there. It is difficult to separate the two, since the history of thought is history and, although it be a question of the philosophy of Spinoza, the reflections of Freudenthal, of Gebhardt, and of Brunschvicg have entered the question as definitely as any of Spinoza's own ideas. This is a difficulty which leads in some cases to unhappy consequences. There are few doctrines that have not been drawn by some critic from the body of Spinoza's philosophy; and for a large part, the criticism of his works has played a game of horror and admiration with each of the assorted themes it has found. Accusations go the whole length from atheism to pantheism and god-intoxicated mysticism. Naturalism and idealism in turn, materialism and spiritualism, nominalism and realism have been drawn with astonishing legerdemain from the demonstrations of the *Ethics*.¹

¹ It would scarcely be desirable to range the whole body of Spinozana according to the epithets employed in them. Apart from the fact that this has been done,

Consequently, if there is a carefully conceived unity in Spinoza's thought, it has been very little apparent in the works of his critics. They have not lacked occasions that permitted them to admire, but their admiration has been aroused for the most part by acute and subtle analyses or by some particular doctrine. There has been universal praise for Spinoza's examination of the passions; bits from the study of the understanding can be used illustratively, disconnected from their metaphysical setting; the ethics may be looked upon as a rare piece of reasoned ordering of intimate experience; the physics can be passed over unexamined, since it is antiquated and, so, unessential. Only rarely have they been stated as the inseparable parts of one system. Spinoza stated them so, but it is perhaps natural that after him there should be more interest in parts of his philosophy or in its development than in the dialectical interdependence of his doctrines. Yet it seems unfortunate that so systematized a philosophy should be read in so fragmentary a fashion and that the system of this thought should

though not literally nor exhaustively (Ernest Altkirch, *Maledictus und Benedictus*, Felix Meiner, Leipzig, 1924), its philosophic importance would be dubious. But lest the statement of the range of disagreement concerning Spinoza seem exaggerated and rhetorical, some examples of each can be adduced with no difficulty. Atheism and pantheism are perhaps the most wide-spread and most frequently repeated of the titles. It will suffice therefore to refer, for atheism, to P. Lami's *Athéisme Renversée* (Paris, 1696), or to P. Bayle's *Dictionnaire Historique et Critique* (article Spinoza: "Il a été un athée de système et d'une méthode toute nouvelle . .") or his *Pensées diverses sur les Comètes de l'Année 1680* ("C'étoit le plus grand Athée, qui ait jamais été . .") (see Freudenthal, *Lebensgeschichte Spinoza's* (Leipzig, 1889), pp. 28 and 34, for the Bayle quotations); for pantheism to R. Avenarius, *Ueber die beiden ersten Phasen des spinozischen Pantheismus* (Leipzig, 1868). This list of either might be increased indefinitely.

Novalis is not only responsible for the phrase "God-intoxicated" but will serve too as example of both idealistic and realistic tendencies in interpretation. (*Fragmente vermischten Inhalts* ed. J. Minor; Jena, 1907. "27. Die wahre Philosophie ist durchaus realistischer Idealismus—oder Spinozismus (p. 182) . . . 355. Spinoza ist ein Gott trunkener Mensch. 356 Der Spinozismus ist eine Uebersättigung mit Gottheit." (p. 292) For naturalism see Nourrison, *Spinoza et le Naturalisme Contemporain* (Paris, 1886), p. v, "Or, critiquer les enseignements de Spinoza, c'est critiquer ces théories mêmes, qui ne sont que des variétés du Spinozisme, et que l'on appellerait bien en leur appliquant une dénomination commune, le naturalisme contemporain. Car toutes elles concluent à n'admettre d'autre réalité que la nature, c'est-à-dire d'autre réalité que l'Univers des corps."

For nominalism see Pollock (*Spinoza, His Life and Philosophy*; London, 1899), p. 142. "Spinoza's nominalism which we have always to bear in mind, is a sufficient warning against assuming that the 'eternal things' have anything to do with kinds, qualities or classification." Powell (*Spinoza and Religion*; Chicago, 1906), hopes (p. 150, n. 1) "that the traditional habit of referring to Spinoza as a consistent Nominalist will soon be corrected."

have sunk so far from view that when it is raised at all, it is only by way of arguments which make it seem painfully forced and which state it finally in a language of mixed philosophic dialects.²

Yet the signs of an attempted consistency are too frequent in the writings of Spinoza to be ignored wholly. Even the externals of his work would indicate a unified conception. Surely it would be an unprecedented piece of carelessness in a philosopher to put off metaphysical, logical, and moral speculations, as Spinoza did when he interrupted work on the *Ethics* and possibly on the *Correction of the Understanding*, to expound political and theological doctrines at variance with his philosophy. There are commentators who would have him do that. And Spinoza was

² Needless to say, these confusions of critics have by this time all been made confusions of Spinoza. It is remarkable to observe how the processes of his thought can be accounted for, how antecedents for his doctrines can be found in history, and how the supposed weaknesses exposed in his philosophy can be traced to simple-minded precautions which he did not have the wit to take! Spinoza has found few critics to follow the ideal which he laid in criticism: he could forget his philosophic beliefs and obliterate himself behind Descartes when he expounded him. There are few restatements of Spinoza's philosophy which advance it, as he advanced Descartes's, on its firmest grounds. See, for example John Caird, *Spinoza* (Blackwood, Edinburgh, 1888), p. 3: "His philosophy is not a completely homogeneous product. It may be said to be the composite result of conflicting tendencies, neither of which is followed out to its utmost logical results." This is then illustrated by the fact that in the part of his philosophy which is concerned with substance there is no place for finite things, and the part concerned with individual things has no place for the infinite! Or see Otto Willmann, *Geschichte des Idealismus* (Braunschweig, 1897), 3 Band, p. 284: "*Spinozas Lehre ist plumper Synkretismus, ohne jeden organischen Charakter, jeder Mystik baar und der Religion entfremdet und gegnerisch. Bei ihr ist alles Mache, erzwungen, auf den Schein angelegt, unsolid; allerorts aufgerafften Ansichten wird durch den Schnürleib der geometrischen Methode einige Façon gegeben; unverdaute Reminiszenzen aus durchblätterten Büchern dienen als Aufputz, lediglich die Persönlichkeit ist der zusammenhaltende Faden; et ist recht eigentlich ein "Privatsystem," was hier vorleigt.*" Or see C. N. Starcke, *Baruch de Spinoza* (Copenhagen, 1923), p. 12. "*Sein Gott ist ein Jehova in verbesserter und modernisierter Gestalt. Welche Elemente er auch aus anderen Quellen in sich aufnahm, er blieb doch stets seiner Rasse treu. Seine Modi sind aristotelisch, seine Attribute cartesianisch, aber die Substanz ist jüdisch.*"

It is a significant commentary on the vast body of Spinoza criticism that one would be at loss to know where to turn for an adequate treatment of Spinoza's physical doctrines; that the English translations of his letters, both Willis's and Elwes's, omit almost everything concerned with science, even the very important Letter VI on Boyle's treatise on Salt-Petre; (see Willis *Benedict de Spinoza*, London, 1870, p. 235, "The sequel of this letter is on the constitution of Nitre, the nature of its spirit, etc., which could not interest the general reader, and would be passed over by the chemist"; there is no consideration of the fact that it contains also significant statements concerning the relation of reason and experimentation); finally that Couchoud (*Benoît de Spinoza*, Paris, 1924), should think it worth em-

certainly too economical and careful a craftsman to introduce metaphysical considerations into an ethical work, if the system of things as he conceived it were irrelevant to the conduct of life which he wished to examine. There are commentators for whom even such irrelevance is not enough, since they would have Book I of the *Ethics*, instead of serving a purpose to make moral action intelligible, expound a system in which conduct could not be conceived.³ The framework in which Spinoza's thought is set, even more than this purpose, indicates a concern with unity. The attempt to reduce an elaborate philosophy to a mathematical form such that all its doctrines can be made to depend on a few postulates, could never have been made if the system were not conceived as autonomous. The apparatus alone of Spinoza's demonstrations argues unmistakably, since propositions are referred to axioms, definitions, and propositions through the whole length of the five books of the *Ethics*, that he supposed his thought to follow through coherently and consistently. The method would be a symptom of the thought even if he were unaware of its implications, and the seventeenth century and Spinoza were too much concerned with method to have escaped the truisms concerning it.

phasizing as the first point of his method (Preface, p. vii) that he will use all the writings of Spinoza, including the non-philosophic treatises. Yet Couchoud so far misinterprets the nature of Spinoza's contribution to science as to account for his attitude by a supposed temperamental unfitness for the technique of science. (See p. 83) "*Malgré son désir, Spinoza demeura, en somme, étranger à l'élaboration de ce que nous appelons la "science moderne." Il n'avait du savant ni la patience, ni la modestie intellectuelle. Il pensait saisir sur le vif, immédiatement, le mécanisme des choses, et, par delà ce mécanisme, il voulait toucher l'intime substance des êtres. La science moderne procède autrement.*" Santayana, on the contrary, insists (Introduction to the Everyman edition of the *Ethics*, pp. xx-xxi) that "the highest part of his philosophy" is not in Spinoza's religion or politics or ethics but in his physics, yet Santayana regards these scientific inquiries only as badly applied arguments brought up in the interest of symmetry. "The details of this scientific speculation, though interesting and masterly, are now somewhat antiquated; for the status of mathematical physics can hardly seem, to a critical philosopher, the same as the status of self-consciousness; and the bold assumption, which Spinoza makes for the sake of system and symmetry, that there is consciousness wherever there is extension, is too sweeping and too paradoxical to recommend itself to a scientific mind." Clearly Spinoza's achievement and intention have been open to misinterpretation, if the attributes can come to this.

³ See Caird, *Spinoza*, pp. 303-304. "The last word of Spinoza's philosophy seems to be the contradiction of the first. Not only does he often fluctuate between principles radically irreconcilable, but he seems to reassert at the close of his speculations what he had denied at the beginning. . . . At the outset, in one word, we seem to have a pantheistic unity in which nature and man, all the manifold existences of the finite world, are swallowed up; at the close, an infinite

The striving after unity has left signs more properly philosophic than these in Spinoza's works, since his philosophy orders itself nicely toward a single goal. No considerable portion of it is wholly free from one preoccupation. There are numerous statements of that problem since almost every consideration of man or the universe yields at some time to it. The opening pages of the *Treatise on the Correction of the Understanding* are characteristically eloquent: whether there is some Good which is truly good and able to communicate its goodness and by which alone the mind could be affected after it had rejected all other things. That question is reiterated with increasing emphasis. Clear knowledge in any human discipline would contribute to solving it. It is significant, too, that the work which contains the most complete statement of Spinoza's philosophy, the one which treats of God and of the relations of man to man, to Nature, and to God, should have been called an *Ethics*. The unity of his thought is indicated there; the *Ethics* is a work of morals and, in that obvious sense, practical. But to be practical it must state its problem fully. The discussion of physics, metaphysics, and psychology contributes always some bit of information which is essential to a knowledge of the nature of man and of the manner in which he should live and act. The *Ethics* is, though critical interpretations have almost neglected that central aspect to emphasize others, an examination of moral ideals and of human potentialities and circumstances; it is not the occasion only for metaphysical speculations and psychological and physical analyses. But if any knowledge is to be derived from the sciences which may bear on man's powers and his opportunities, that knowledge will help organize ethical philosophy. "Ethics . . . should," Spinoza says, "as everyone knows, be based on metaphysics and physics."⁴

The force binding Spinoza's philosophy in a unified whole, then, is precisely the one which directs the sciences to a moral ideal. Obviously knowledge is indispensable for the examination of ethical problems. It is impossible to self-conscious mind, in which all finite thought and being find their reality and explanation."

⁴ *Epistola* XXVII (*olim* 38) to Blyenbergh; IV, 160-161.

engage in moral inquiry while the nature of good and evil is wholly unknown and unexamined. Even an elementary experience of things suffices to show that the same object may be good in one set of circumstances and evil in another, that in itself alone it can not be good or evil, perfect or imperfect, and that therefore there is no good or evil in the nature of things. But these are metaphysical considerations. Human abilities are unequal to a continued vision of things as they are in the eternal order and fixed laws of Nature. Life and experience lead man to conceive a human nature more perfect than his own and to seek the means that will lead him to such a perfection. This is the origin of notions of good and perfection; whatever advances man toward that more perfect nature is a true *good*; the *supreme good* is that which enables him, together with other men, to attain to that nature; all science and philosophy should be useful to that end. "What that nature may be," Spinoza says, "I shall show in its proper place, namely, that it is the knowledge of the union which the mind has with the whole of Nature. Therefore this is the end to which I tend, obviously, to acquire such a nature and to endeavor that many acquire it with me; that is, it is part of my happiness to take care that many others understand as I do, and that their understanding and desire agree thoroughly with my understanding and desire, and in order to achieve this it is necessary to understand as much concerning Nature as is needed to acquire such a nature, and moreover it is necessary to form such a society as would bring about that as many as possible attain that nature as easily and securely as possible. Again care must be taken concerning Moral Philosophy as well as concerning the Theory of the Education of Children; and since health is not an unimportant means to this end, the whole science of Medicine must be arranged appropriately, and finally inasmuch as many things which are difficult are rendered easy by art and since we can gain a great deal of time and benefit by it, Mechanics must by no means be despised. But before all else a method must be thought out of healing the understanding and of purifying it as much as is possible at the beginning that it may understand things fruitfully

and without error and as well as possible. From all this anyone will now be able to see that I wish to direct all science to one end and goal, namely, that the highest human perfection, as we said, be attained, and so, all that does not advance us in the sciences to the end and goal, must be rejected as useless, that is, to say it in a word, all our operations and also our thoughts must be directed to this end.”⁵ This is reiterated in a foot note: “There is but one end in the sciences to which all must be directed.”

Consequently, if ethics is to pursue an inquiry into the nature of goodness and into the means of attaining that which is good, it is unavoidable that it draw on metaphysics and the sciences. But it must be seen at the very outset of the inquiry—in fact, it should have appeared in what has been said—that there are two ideals involved in ethics, not only the right conduct of living, but also the selection of conduct that will fit to the higher ideal of living and that will lead to perfection. There is the good life which may be led though one have no unusual powers of understanding, and there is the perfection which is the status and the reward of the well-guided intellect. One must live in a well-ordered state and according to the rules that lead to good health and friendship to live well. Such things, however, are external and not in the control of man. To know its highest perfection, man’s nature must be considered apart from his circumstances in relation to the intelligible nature of things; it would be tautology to say that knowledge and metaphysical speculation are needed to attain to this perfection.

At no point, then, can ethics proceed certainly without the aid of science. A knowledge of the nature of the body, of the mind, of human society must complement at each step the progress of the science of ethics. No question, on the other hand, can come up which does not involve ethical problems. When John Bouwmeester writes to ask Spinoza “if some method is given or can be given by which we can arrive unhindered and without weariness at the understanding of the best of things, or are our minds, like our bodies, subject to the vicissitudes of chance and our

⁵ *Tract. de Int. Emend.*; II, 8-9.

thoughts ruled by fortune rather than by skill?", Spinoza replies by detailing the "method by which our clear and distinct perceptions may be directed and concatenated." Then he concludes his answer, "it remains only to warn you that assiduous meditation and a resolute and most constant mind are needed for all these matters, and to insure them it is before all necessary to set up a fixed mode and plan of living and to prescribe some definite end."⁶ The problem of ethics slips imperceptibly into the problem of logic and the materials relevant to it are drawn from the metaphysics of thought, since ideas which are formed from the necessity of our nature alone, depend on fixed laws and must be true.⁷ This is the metaphysical problem of the relation of fixed and eternal things to contingent and changing things; it is the logical problem of the sufficient grounds of certainty; it is the central problem of ethics since the contemplation of the best things is exactly that knowledge of the union of our minds with Nature, and such knowledge makes human perfection. But meanwhile, even in a problem of logic, one must be reminded (by admonitions to assiduous meditation, to a constant mind and fixed mode of living) that to arrive at truth is part of a way of life and involves moral considerations.

In the metaphysical reaches of thought the end of all activity will be single. There is no difficulty in the fact that the intellectual love of God is at once beatitude and the contemplation of truth. In fact, this identity in the changing world is the source of the solution of ethical problems. Not that action need be rational, nor need it even be subject to rational control, but logic on the one hand is a function of a living thing, and morality on the other is the deduction of rules or means for the practical use of the faculty of knowing. Virtue is neither the reward of wisdom nor its necessary prerequisite; it grows with each item of knowledge, whether of the nature of the universe in which man is placed or of his relation to its parts. It may be as unified as the source of being and as diversified as the sum of the sciences; for man is a part of a world and he is caught in its

⁶ *Epistola XXXVII* to Bouwmeester; IV, 187-189.

⁷ See *Epistola XXXVII* cited above.

logical implications, but he is affected directly too by things in it other than himself, moved by his desires with respect to them, and helped and hindered variously by them in attaining the ends he has set up. Consequently if one start with a concern for man and his perfection, a complete philosophic inquiry has been initiated in all its logical and scientific ramifications. "For the bounds of nature are not the laws of human reason which are directed only to the interest and preservation of man, but other and infinite laws which regard the eternal order of all nature, of which man is a particle; all individuals are determined from the sole necessity of this order to exist and to operate in a fixed manner."⁸

The laws of human nature are to be considered; but there are also laws which determine man's body and other bodies, and there are the laws which determine his relation to the things of his environment. Finally, the nature of good is such that goods will be developed proper to any field in which man engages: the improvement of his mind, the development of his body, the continuance of amicable relations with other men in ordinary association, in political society, or in religion. But the *summum bonum* must be sought in none of these but in the law of them all, in the being of God which sets the order of the universe. The *Ethics* falls easily into a division of subjects which takes all these into account, and it is not surprising to find that Spinoza's contemporaries seem to have spoken of it in terms very much like these. In 1676 Leibniz had not yet seen the text of the *Ethics*, but he had spoken of it with several of Spinoza's friends, and from their conversation he knew that it would be "about God, the mind, beatitude or the idea of a perfect man, about the medicine of the mind, about the medicine of the body, etc."⁹

⁸ *Polit.* II, par. VIII; III, 279.

⁹ "Mons. Tschirnhaus m'a conté beaucoup de choses du livre de Spinoza. Il y a un marchand à Amsterdam, nommé Gilles Gerrit puto, qui entretient Spinoza. Le livre de Spinoza sera de Deo, mente, beatitudine seu perfecti hominis idea, de Medicina mentis, de Medicina corporis, etc." Aus Leibniz' Papieren, *Die Lebensgeschichte Spinoza's*, J. Freudenthal (Leipzig, 1899), p. 201. Somewhat before this (November 14, 1675) Schuller had requested that Leibniz be permitted to see the manuscript (*Epistola* LXX; IV, 303) and Spinoza had refused (*Epistola* LXXII; IV, 305).

So intimate is the interdependence of all these strands that Spinoza would have had to become a system-builder to express even a fragmentary part of his convictions. The *Ethics* was to have expounded that moral center of his philosophy, the knowledge of the union which the mind has with the whole of Nature; the *Correction of the Understanding* was to supplement that with the medicine by which the mind may be brought to a condition in which it might enter into that union. But the two had to encroach on each other unavoidably, since each as it proceeds becomes more clearly incomplete without the other and each could be understood only if the other had already been expressed. In both the *Ethics* and the *Correction of the Understanding*, the inquiry is in the interests of the life and career of an individual being, but it is impossible to explain what a thing is or how it will act, if it be considered in terms only of itself. There are problems connected with it which are problems of natural history; to resolve them the consequences of the action of other things must be taken into account. Other problems are involved which belong rather to metaphysics, and in them are implicated the endless principles by which all things are. Whatever we do and whatever we know is relevant to a universe of things acting upon each other and bound by necessary and intelligible laws: ultimately each thing is not merely part of a cosmic order but an element in a logical unity.

The constant recurrence of God as an important principle of explanation in the philosophy of Spinoza has just this significance. It is a manifesto that there could be no insignificant event in the world which this philosophy is to describe; it is scarcely to be wondered at that there will be no inconsequential detail in the philosophy that is expounded. The fact is particularly important since this is the philosophy of a man who would direct all the sciences to an ethical end: the *Ethics* and the *Short Treatise* begin with an examination of the nature of God; the *Treatise on the Correction of the Understanding* leads back to God and examines the relation of the human mind to the metaphysical structures discovered in the *Ethics*; even the discussions of the *Political Treatise* and the *Theologico-*

Political Treatise are carried very frequently to metaphysical principles and to God. There is finally an apparatus to bind the whole together; the politics, the theology, the logic, and the ethics, are referred, all, by footnotes and scholia to the metaphysics. Moral and intellectual judgments are not to be comprehended fully without their metaphysical implications: so the *Ethics* opens with frankly metaphysical questions and the *Treatise on the Correction of the Understanding* can proceed only by referring back to "my Philosophy" for further explanation.¹⁰ A mathematical physics or a transcendental psychology may be developed, but without their relation to each other they are incomplete, and that relation can be explained only by the doctrine of God. Religion and politics will be misunderstood and therefore misdirected if they are not considered in their proper subordination to God and the laws determined by his attributes. In a word, although information and details may be amassed from experience and may even be constituted into a body to be called a science, that science will not be true knowledge unless there is a sense of inner and logical necessity that binds it to other certainties: that perception can come from no experience, but only from reflection. This conviction must be implicit in the statement of any part of Spinoza's philosophy. To bring it out he had to resort to constant reiteration: physics, psychology, and ethics operate upon identical mechanisms. Any statement is a partial statement, only partly intelligible in itself; yet each contributes to the illumination of other statements. It is not difficult, consequently, to account for some of the misinterpretations to which Spinoza has been subjected: quotations can be found in his works to support most of them.

Spinoza's philosophy would be a difficult and subtle one to state even if it were completely formulated; as he left it the articulation and dependence of its parts are not perfect. Distinctions are frequently reiterated to become sharp only gradually; sometimes it seems as if definitions are modified in repetition. *Extension* and *Thought* are defined only after repeated explanations have made clear how these attributes are to be distinguished from the traditional ones

¹⁰ *Tract. de Int. Emend.* Notes to pages 10, 12, and 24; also page 36.

and what correlation and what contrast there is to be between them. Sometimes the difficulty seems to be one of expression, for though the language is tersely exact and beautifully accurate, it bears the marks of painful revision. Since there is so much misunderstanding it seems probable that the work of revision may not have been perfected or completed. But possibly the fault is not always Spinoza's, and if what he means by, say, *idea* seems to be labored to its final conception through the whole length of Book II of the *Ethics*, the confusions may not have come from any vagueness in his mind, but from the variety of senses in which we have been reading the word since his time.

In expression as well as ideas Spinoza stands between two ages. Within his lifetime even the language he used had come to have different meanings. He is a contemporary of the first of the philosophers we have come to call modern, but in a significant sense his intellectual fellowship is with the medievals. This place which he occupies in the history of thought is another source for much of the strange interpretation that has been found for his doctrine and his terminology. He was concerned largely with problems which occupied the attention of his predecessors; and except in rare instances, the statements he cited with approval from the works of his contemporaries pleased him for other reasons, and because of other implications, than those which their authors had tried most to bring out. The misfortune is that his generation and those that succeeded it have faced about and that he expressed his convictions partly in terms which they continued to use.

But even these readjustments do not leave the writings of Spinoza formed in a perfect and coherent body in which there are no conflicting doctrines and no unfilled lacunæ. Sometimes the difficulty and the confusion are genuine philosophic problems which evolved in the course of his work and which yield no solution. He was faced, to take one example, with the problem of the relation of finite bodies to God. In his first work, it seemed a simple problem, and he disposed of it: "now to prove that there is a body in Nature, can be no difficult task for us."¹¹ The proof

¹¹ *Short Treatise*, Pt. II, ch. XIX, p. 119.

requires only a knowledge of God and of his attributes. Fifteen years later a correspondent, Tschirnhaus,¹² raises that problem in almost the same terms: "In the first place I can conceive only with difficulty how the existence of bodies which have motion and figure can be demonstrated *a priori*; since nothing of the sort occurs in extension, considering the thing absolutely." Spinoza's reply takes up other problems raised in the letter, but in regard to this he says only that if Extension be conceived as Descartes conceived it, that is, as a quiescent mass, it is not only difficult but impossible to demonstrate the existence of things. Tschirnhaus recognizes and expands on the difficulties in the case of Descartes, but asks Spinoza to indicate "how the variety of things can be shown *a priori* from the concept of Extension according to your meditations."¹³ Spinoza answers that the variety of things can not be demonstrated from the concept of Extension alone, that consequently Descartes had defined matter badly as extension, but that it must necessarily be explained through an attribute which expresses eternal and infinite essence. This position and statement were those which in the *Short Treatise* seemed to him the solution of the problem. "But," he adds now, "I shall treat of these things with you more clearly some day if life be sufficient. For up to the present I have been able to put nothing concerning these matters in order."¹⁴ Since that reply, written on the fifteenth of July 1676, is the next to last of the letters we have of him, life was not to suffice for removing this difficulty. But it had been long enough to indicate that the confident statement of the *Short Treatise* was the statement and not the solution of the problem: bodies are related to the attribute of Extension; but the mechanism to mediate between bodies and Extension was never set in order. There are other such definite outlines in the *Ethics* which were never to be filled in.

There are consequently enough elements of confusion gathered about the works of Spinoza. But it does not seem too much to hope that the coherent logical form, which Spinoza strove so definitely and consistently to confer upon

¹² *Epistola* LXXX (olim 69), May 2, 1676; IV, 331.

¹³ *Epistola* LXXXII, (olim 71); IV, 333.

¹⁴ *Epistola* LXXXIII (olim 72); IV, 334.

his philosophy, can be recovered in at least the detail that he gave it. Restatement of that unity is needed particularly since it can be made with an emphasis determined by criticism to which, though he could not have anticipated it, Spinoza has given the implicit answer. From the method he employed and from the confidence he had in the efficacy of deductive or synthetic reasoning, one is led to expect that the answer will be a consistent and autonomous doctrine. It may be incomplete in some details, for the unity is a formal one, and concerned, therefore, not with the specific inclusion of everything that is known, but rather with the conceivable manner in which anything that may be known is to be included. To say this is only to insist on Spinoza's firm conviction that the search for truths and goods could be conducted with profit only after one had investigated what is implied in the fact that we can conceive a truth or can desire that which we conceive to be good. Then one may speak of the power of the intellect and the strength of the emotions. Such an insistence will bring out forcefully what is involved in his philosophy and will recognize, too, as a proper consequence of this philosophy that in the age which was to go into a madness of observation and experimentation, he could appraise Bacon's "little stories"¹⁵ and insist that Boyle's experiments revealed and could reveal nothing which was not already known about the nature of things.

In view, moreover, of this conviction that things in their essences are articulated in a close system, there must inevitably be rapid transitions and reduplications from part to part of Spinoza's philosophy. His dominant ethical concern leads through a metaphysics, and the unity of purpose takes on a philosophic significance in that it is based on a unity found among the facts of physics and ethics and metaphysics. Ethics must be preceded by an analysis of experience in terms of essence and existence. For a thing or for an idea to be, it is necessary not only that a set of circumstances and antecedent conditions prepare for it, but also that it be and exemplify one of a system of essences which has come, in it, into existence. This is the metaphy-

¹⁵ "*Mentis sive perceptionum historiolum*," *Epistola XXXVII* (*olim* 42); IV, 189.

sical unity which is one of the important properties of God's nature; Spinoza devotes the first part of Book I of the *Ethics* to it. That the existence of God and his simplicity are necessary is a statement that there is an order in nature; the order is all the implications and sequences of things, not in time but in essence, so that, in brief, the nature and the sum of things indicate a set of conditions; these properly analyzed follow directly from the nature and attributes of God.

This metaphysical background is so very important because the ways of knowing and the nature of all things, including the passions, can be explained only in view of it: they are in final analysis only the symptoms of the distinction between things and the metaphysical basis of things. The nature of no thing save only God determines that it must exist; that a thing is, is separate from what it is, save only that to be, it must be just that. Spinoza found, for this reason, no direct means of deduction of the existence of things from God. It is the reverse of the modern problem of logic — for whereas Mill found that any generalization built on experience was only tentative and hypothetical, Spinoza working from general notions to experience, found that experience is unreliable and that generalizations reveal rather what a thing must be than what it is. The whole problem which appears in various forms in different departments of philosophy is here: Spinoza's medieval predecessors would have said that a principle of individuation was needed; in essence a thing which exists is no different from a thing which does not exist; it is body or some equivalent principle which is the cause of all particularity; its existence depends on physical antecedents, but to be, it must be something. For Spinoza the essence, which in the realm of ideas and eternal things constitutes the thing that which it is, becomes in the realm of existence a tendency and inclination to persist in existence. In man this is a *conatus* become self-conscious; it constitutes striving and desire. The contribution of metaphysics to the ethical problem is precisely in this restatement: how can the impulse which comes from experience and from things be made commensurate with the inclination which is the essence of the thing. To ask this is to inquire what the

strength of the passions and the power of the intellect are. Or again, it is said that infinite modes proceed in infinite ways from the divine efficacy: the tendency of a body to move in a straight line, the tendency of ideas to follow in a sequence of associations, and the tendency of emotions to follow in the fulfillments and frustrations of desires, all these have explanations which are remarkably similar. But the similarity is to be anticipated in the metaphysical truth that extension and thought are attributes of God and that the order and sequence of ideas is identical with the order and sequence of things. An insistence on the unity of Spinoza's thought is an insistence only on the ground and intimacy of such interdependences.

Spinoza is, in the sense made clear by this persistent unity and implied in his constant cross-references, the best introduction to himself; he is, himself, his own best commentator. His early works often contain fuller statements of his thoughts and not infrequently there are given the detailed reflections in which he distinguishes what he says from what would have been held traditionally. It is possible to trace some conceptions through perceptible steps until they arrive finally at an adequate statement; the repeated restatements of a doctrine, by rounding out different approaches to it, may indicate it clearly, though it be a doctrine which defies accurate exposition; sometimes an early opinion is definitely abandoned. In the works expounded according to the geometric method, statements that seem questionable or even unintelligible may be illuminated by the necessary references to doctrines on which they depend. Or analogies may be carried from one realm to another in which the inner continuity is the same; so the Lemmas of the Second Book of the *Ethics*, not only state the physical principles of all bodies, but illustrate as well the fundamental principles of thought.

The plan which this study will follow is determined by these facts. An attempt will be made first to indicate the possible influences which entered into the intellectual formation of Spinoza. There are various materials which may be used to this end: first, what is known of his life and of his associates and his relations to them, and for this we have testimony in the writings of some of his contempo-

raries and in his own letters; second, what is known of the intellectual influences that helped mold his thought, and these can be judged somewhat from the list of books left in his library and from the citations of authors in his works and from the familiarity which he shows with some traditional problems and discussions. Such an investigation should reveal at least the questions that recurred in his reading and his reflection; both the possibility and the utility of determining definitely what philosophy inspired him to any particular ideal or what doctrine influenced him to any conviction, are rather dubious. But the broad lines of materials to be used and problems to be considered may be marked. Then, on this background, the purpose which manifests itself early in the works of Spinoza may be traced through the modifications of his statements. Finally in the second part of this study the thought of Spinoza may be examined in a unity and entirety made more definite by this approach. This last can perhaps be done best by tracing the relations of the ideas in his mature works, so far as that is justified by his explicit statement, and reënforced wherever possible by reference to the earlier works. A unity in his thought emerges out of the dominant purpose which animates his investigations, but the coherence in which the final doctrine is set is not the outgrowth only of this conscious directing; in it the philosophic problems uncovered along the way find a metaphysical solution.

CHAPTER I

THE BACKGROUND OF SPINOZA'S THOUGHT

I

THE direction of Spinoza's thought in its evolution may be judged with reasonable accuracy, but it is more difficult to disclose from his life and works the precise antecedents to his doctrines. The sources of his philosophic speculations are implied in a general way, or sometimes are even named; the inventory of his library has been preserved for us; and frequently a conception of his can be attributed to one writer if the book of that writer is to be found in the list.¹ But it is not always safe to push inferences much beyond the obvious ones implied in such safe conclusions.

Born into the tight orthodoxy of the portuguese jewish colony of Amsterdam, Spinoza seems to have spent the effort of a serious youth in absorbing whatever was available there of jewish lore. There is evidence that pious men were not lacking to guide him in this study,² and critics have been tempted frequently into speculations concerning the possible relations between the youthful Spinoza and Rabbi Saul Mortiera and Manasseh ben Israel and Rabbi Aboab.³ Whatever those relations may have been, he entered the jewish school of Amsterdam at the age of seven (1639) and at the age of twenty-three (1655) he still attended the synagogue.⁴ He acquired in that time at least a familiarity with the *Bible* and biblical criticism,

¹ *Inventaire des Livres formant la bibliothèque de B. Spinoza*, (La Haye, 1899); the list is reprinted in *Die Lebensgeschichte Spinoza's* of Freudenthal (Leipzig, 1899), pp. 160-164.

² See for example Kaufmann, *Revue des Etudes Juives*, XXV, 207.

³ Meinsma, *Spinoza und sein Kreis*, pp. 140 ff; Wolf, Preface to the *Short Treatise*, pp. xxiv ff.; de Rooijen, Preface to the *Inventaire*, p. 36; Kaufmann, Notes to the *Inventaire*, p. 207.

⁴ See the documents in Freudenthal, *Lebensgeschichte*, pp. 111-114.

with kabalistic speculations⁵ and with the *Talmud*. Biblical criticism would carry him into whatever was known in Amsterdam of Jewish philosophy—to at least knowledge of Maimonides,⁶ of Crescas,⁷ and of Leon Hebreu.⁸ For the second period of his life, after his excommunication from the synagogue (July 27, 1656), we have information, in a sense definite, but also as inconclusive. Clearly he was widely interested in science; he was influenced by Descartes in scientific and mathematical speculation and in philosophic method; he was impressed by Hobbes in politics and in some points of ethics. Bacon is mentioned in his letters and there was a copy of the *Sermones Fideles* in his library;⁹ analogies in doctrine have led to the conjecture of Bruno as a possible influence.

Despite the rather definite items which can be assembled as possible ingredients to the intellectual formation of Spinoza, there is of course no means of determining the exact history of indebtedness and of growth. His works are not self-conscious or autobiographical enough to permit more than verisimilitude to attributions and to lines of influence. We have only indications in footnotes and letters, and the implications to be drawn from the books he left in his library. For philosophic purposes, however, this should be enough. Even more, the paucity of evidence makes necessary an economy which might be recommended on philosophic grounds: borrowings and influences are important here only when they help clarify some doctrine or some stage of development; the obvious effect of Hobbes's doctrine of natural rights on Spinoza's philosophy is at least as significant as the fact that a copy of *De Cive* was

⁵ The question of whether Spinoza was learned in kabalistic writings and whether he was influenced by them is answered best in his own words. "*Quod sane an ex stultitia et anili devotione, an autem ex arrogantia et malitia, ut Dei arcana soli habere crederentur, haec dixerint, nescio; hoc saltem scio, me nihil, quod arcanum redolet, sed tantum pueriles cogitationes apud istos legisse. Legi autem et insuper novi nugatores aliquos Kabalistas, quorum insaniam nunquam mirari satis potui.*" *Theo.-Pol.* IX; III, 135-136.

⁶ *Inventaire*, p. 132; Freudenthal, no. 19. See also Salomon Rubin, *Spinoza und Maimonides*, (Vienna, 1868); and frequent citations in Spinoza.

⁷ *Epistola* XII to Meyer; IV, 61. Joël, *Don Chasdai Crescas' religionsphilosophische Lehren* (Breslau, 1866), reprinted in *Beiträge zur Geschichte der Philosophie* (Breslau, 1876).

⁸ *Inventaire*, p. 152; Freudenthal, no. 48.

⁹ *Inventaire*, p. 193; Freudenthal, no. 141. *Epistola* II to Oldenburg; IV, 9.

found among Spinoza's books,¹⁰ and the latter fact is important chiefly as it lends additional substance to the former. It is surely as relevant that Spinoza opposed some fundamental tenets of Descartes's philosophy as that he quoted Descartes and read his works. The indebtedness of philosophers is in doctrines, and ultimately the history of thought is to be traced in more subtle data than the presence of a book in a scholar's library or of a quotation from it in his works.

It would be futile, then, to read the history of philosophy for prognostications and echoes of Spinoza. Anticipations of his doctrines could be found crowded together in very unlikely places, since almost any doctrine, read with sufficient detachment, might be a remote preparation for any other. To insist, however, that Spinoza's philosophic attitude was defined by the broad learning he had in medieval jewish philosophy is a different enterprise from tracing precise antecedents. Clearly he opposed some of the doctrines that were held almost universally by jewish philosophers, such for example, as the creation of the world in time. But it is scarcely a question of principles, or of individual doctrines. If it were, it would be sufficient to point out that it would have been impossible for a man to assume the whole body of medieval principles and be, not original and constructive, but only consistent. There was no less divergence in philosophic opinions in the period that separated Isaac Israeli and Crescas than in a period of four hundred years in any other philosophic milieu. But the characteristics of a philosophy are fixed as surely by the questions that are asked as by the solutions that are found. Whatever the purpose of debate, philosophic ends are achieved rather less by the elimination of one of the contesting doctrines than by the incidental clarification which both may receive, and even the fact that debate is found possible accomplishes something to that end. In that broader sense Spinoza is unintelligible without some survey of the discussions of his medieval predecessors.

The philosophies that grew up in the middle ages — arabic, jewish or christian — bear at least one total simi-

¹⁰ *Inventaire*, p. 188; Freudenthal, no. 129.

larity to each other which makes possible the application to them of the term scholasticism in a sense that is not entirely empty and imaginative. There is in each a growth which seems to have for motivation an obscure need probably inherent in religious traditions to interpret themselves and understand themselves. Whatever the motivation, the contact of a monotheistic tradition with the works of the Greeks was to bring forth in each a scholasticism which orders the world on a broadly congruent plan. There were, of course, crossed influences; jewish thought derived much from arabic, and christian thought from both; on the other hand the first teachers of the Arabs were Christians; but even this borrowing was possible only because the problems and the philosophies were from the first surprisingly similar. The frameworks are consistently neoplatonic, and the progress of philosophy is usually marked in them by the degrees in which Aristotle is made to fill in the details included within the frame. Arab, jewish, and christian thought elaborated in varying proportions through the centuries syntheses of aristotelianism within neoplatonic *schemæ*. Aristotelian doctrines were doomed frequently to contradict neoplatonic elements, sometimes they were to correct them, but, though the history of thought in the middle ages is largely the progressive triumph of aristotelian doctrines, not till the very end of the middle ages is neoplatonism eliminated wholly.

The close union of the two strains in each of the traditions has had its obvious historical explanation. Under the encouragement of the mohammedan caliphs, particularly of the Abbasid dynasty which was founded in 750 A.D., syrian scholars and physicians translated the writings of greek scientists and philosophers into syriac and arabic. It was thus that in medicine Hippocrates and Galen, in mathematics Euclid, Archimedes and Ptolemy and in philosophy Aristotle, Theophrastus and Alexander of Aphrodisias became available to arab scholars. The matter, the method, and the terminology for their philosophizing was to be found in Aristotle. But among the works that purported to be of Aristotle were two treatises from other hands, *The Theology of Aristotle* and the *Liber*

de Causis. The first was in reality a series of extracts taken from the *Enneads* of Plotinus (Books IV – VI) and the second was borrowed from the *Elementatio Theologica* of Proclus.¹¹ It was inevitable that arab philosophy be cast on neoplatonic lines, and what is true of the Arabs is true in the same degree of the Jews, since they were pupils of the Arabs and found an almost identical use for Aristotle. In fact even ibn Daud, Maimonides, and Gersonides, the most aristotelian of the medieval Jews, preferred to appeal to Alfarabi or Avicenna or Averroës for authority concerning the aristotelian position, rather than go directly to the works of Aristotle.

The neoplatonic mark is placed on christian scholasticism in a somewhat different fashion. There is a strong neoplatonic influence in Augustine, and from him perhaps christian philosophy took its particular cast. If later and more direct influence was needed, there were the translations which Abbot Hilduin of St. Denis and John Scotus Eriugena made in the ninth century of the works of the pseudo-Dionysius the Areopagite. Derived from such origins there is in subsequent philosophies an ordering of the world in which all things are drawn from and are dependent on God. In that ordering the religious tendency manifests itself in an impatience to snap the universe, which has scarcely been detached from the being of God, back into his ineffable essence. Philosophic preferences are evinced in an inclination to loiter somewhat along the way by which the soul adventures back to the source of things. Where the religion is one of salvation, as the christian religion is, the world will be noticed only so far as it is a reflection of the nature of God and so far, therefore, as it may clarify some detail of the itinerary of the soul back to God. St. Augustine had in mind more than a criterion of truth when he decided to believe in order to understand and to understand in order to believe; his concern was not entirely to find a way in which his capacities might be applied best to the constructed universe but to find the most efficient realization of the end of man — sal-

¹¹ See Valentine Rose, *Deutsche Literaturzeitung*, 1883, p. 843, and Husik, *A History of Medieval Jewish Philosophy*, Introduction, p. xx.

vation.¹² Philosophy interposes itself in the flux and reflux of the world out from God and back to God, and from that interposition problems of a purely philosophic nature emerge: the relation between eternal creation and a temporal existence, the nature of human knowledge, involving in its superior forms manifestations of ideas by God, in its inferior forms the action of individual things on sense organs and their consequences in mental processes, and the analysis of the ends of man. These are questions which become finally considerations of true and false, good and evil, and of the relation of reason and faith.

In general the form of the philosophy of Spinoza shows signs of having grown on such a pattern. There is at least a relationship close enough to lead, say, to the visiting of the accusation of pantheism on the head of John Scotus Eriugena for the very reasons given when it is applied to Spinoza.¹³ Startling improbabilities in the history of thought may be explained by considering this triply intermingling line of scholasticism, accumulating bits of classical philosophies, and moving down the ages to emerge in different centuries with a constantly fuller aristotelianism bulging from a neoplatonic frame. Such a view may be effective in quieting some of the critical apprehensions concerning Spinoza's neoplatonism; it definitely minimizes the curious and rather recent insistence on Bruno's possibly dominating influence. Finally it makes the spinozistic mysticism, instead of an anomalous addition, the natural outgrowth of the rationalistic *Ethics*: for in high scholasticism mysticism and rationalism may be in the same description of things, save that mysticism prefers to contemplate the return of the soul to God while rationalism makes the same journey more slowly and discursively that it may also

¹² *De Lib. Arb.* l. II, c. ii, n. 6, Migne's *Patrologia Latina*, vol. XXXII, col. 1243; *Epist.* CXX, c. i, n. 3., vol. XXXIII, col. 453. The introduction of St. Augustine is not irrelevant to the formation of Spinoza's thought since there was a copy of an *Epitome Augustini Operum Omnium* in his library. *Inventaire*, p. 131; Freudenthal, no. 17.

¹³ There have been critics sufficiently impressed by the similarities in the philosophies of Eriugena and Spinoza to establish rather fantastic possibilities of connection between them. Thus Henry Bett (*Johannes Scotus Eriugena*, Cambridge, 1925, p. 194) would have him influenced either by Bruno (who may not have read Eriugena but professed himself a disciple of Nicholas of Cusa, who had) or by the kabalists who wrote the *Zohar*, which presents coincidences with Eriugena's doctrine.

satisfy its curiosity concerning the soul and the grounds of its knowledge. So Spinoza is no more a contradictory development out of jewish scholasticism than Duns Scotus out of christian, and both crown their high intellectual vision with a mystic completion.

It is needless to determine more than this concerning Spinoza's antecedents.¹⁴ Even a cursory glance down the succession of medieval philosophies would be enough to mark certain family resemblances. In all of them God is the source of things, and though there are many differences concerning the way in which the world emerges, by emanation or by some manner of creation, the qualities that exist in things fall, as a result of God's action or his mere being, into fixed relations to each other, and the world is made in some way to represent or reflect attributes which are merged in God. God is simultaneously the source of all being and all intelligibility, so a nice parallelism of logic and ontology must run through nature. God defines the being of things; from him flows the power that motivates the whole sequence of movement in physical objects; he is the idea that gives meaning to all things that follow from him. They are and are known at the same time by means of the same derivation from him. God is therefore reflected on all sides and by all things; that things are and that they are to be understood, are equally manifestations of him.

The soul must travel back this course out of God to a

¹⁴ The *Inventaire* lists Maimonides's *Guide to the Perplexed* (p. 132; Freudenthal no. 19), Manasseh ben Israel's *Esperanca de Israël* (p. 184; Freudenthal no. 118), Leon Abarbanel's *Dialogos de amor* (Leo Hebræus, *Dialogues of Love*; p. 152, Freudenthal no. 48). There is little direct reference in Spinoza to his hebrew sources, except in matters that concern biblical criticism. His quotations in that latter field, however, are so numerous and widely distributed as to indicate a broad knowledge of hebrew philosophies. He cites Maimonides, ibn Ezra, Gersonides, Hasdai Crescas, Juda Alfa 'Har (R. Jehuda Alpakhar; *Epistola* XLIII; iv, 224) and Abraham ben David. When he mentions them in philosophical connections, it is done familiarly: in one place he calls them *Peripatetici recentiores*, in another he refers to *omnibus antiquis Philosophis*, but only once does he mention in a philosophical matter specifically *Judeum quendam Rab Ghasdai vocatum* (R. Chasdai Crescas). Crescas misunderstood the ancient proof of the existence of God as First Cause according to *Epistola* XII (*olim* 29) to Lewis Meyer (iv, 61-62); partial acquiescence is given to the doctrines of the ancient Hebrews in *Epistola* LXXIII (*olim* 21) to Oldenburg (iv, 307) particularly in the doctrine that all things are in God and move in God. There is a half-approving, half-deprecating mention of jewish thought in *Eth.* 11, 7, sch. (11, 90) relative to the correspondence of modes of extension and modes

salvation of some sort, depending on the tradition, and on the century and phase of the tradition. The Christians developed the neater trinitarian arrangement, and there are special signs of God in the triple manifestations of him in nature: in the being of things and the logic of things and in the moral way to God. For St. Augustine God was the source of being, as creator; of truth, as intellectual light; and finally of moral goodness by his grace; he was the cause of the constituted universe and the light for perceiving truth and the fountain for imbibing felicity. From that, Christians were to insist, came the platonic division of philosophy into the science of Being, of Truth, and of Good; into Physics, Logic, and Morals.¹⁵

The medieval jewish tradition evolved no such stylized form, yet it had the same problems to face: what is the relation of God to the world and what is the reality of the attributes we ascribe to him? Sometimes, as in the case of Saadia, precisely the three attributes were chosen for God — life, power, and knowledge. But even in other cases the dangers no less than the solutions are sufficiently similar to permit each tradition to learn something from the other in late scholasticism. The pathway to the contemplation of God is marked and the universe is laid on a definitely similar plan. It is significant that Spinoza's thoughts on God bear kinship at some point to the doctrines of all the great medieval theologians. But the fact that, say, Israeli might be quoted to elucidate Spinoza's doctrine of God does not force the rest of their doctrines to similar conclusions; the psychologies expounded by the two philosophers are notably different. So too, in the field of God's influence on man, Spinoza may follow Crescas in his doctrine of man's freedom — how far precisely, would be difficult to determine; but the further doctrine that love, not intellect, is the essence of the soul, need not follow from it, even despite the fact that in the mystic regions where the soul approaches God, being, love, and

of thought. He quotes specifically the hebrew doctrine that God is life (*Cog Met.* II, 6; I, p. 260). There are more explicit mentions of biblical scholars and interpretations in the *Tractatus Theologico-Politicus*.

¹⁵ See S. Augustine, *De div. quæst.* LXXXIII, q. xlvi, c. ix-x, Migne's *Patrologia Latina*, vol. XLI, col. 234-236.

intellect are no more distinguishable in the soul than they are in God.

II

THE innovations, then, which will be found in Spinoza's philosophy do not fall out of the line of innovations that had been made through the middle ages. They follow out of the succession of readjustments of dogma and reason, of religion and philosophy. Philosophy had long been concerned with the unity of things, and it was neither out of deference nor by accident that it chose to turn to God and the unity in God. But there were conditions to be fulfilled before reason could be admitted to religion. On the one hand intellectual explanations were to be employed on the traditional documents, and even intellectual ideals and virtues might be introduced into the tradition. This meant, on the other hand, the fitting of characteristically religious doctrines to the universe: rewards and punishments, even if they were inscrutable, were henceforth to be meted in accordance with the system of things; intellectual conditions as well as moral ones had to be fulfilled before the soul could return to its source; it was to be freed from the body by intellectual excellence and right conduct. Judah Halevi and Crescas are the only outstanding exceptions to the common opinion that religion and philosophy are identical in content and different only in method. Israeli defined philosophy as self-knowledge and keeping from evil. When a man knows himself, he knows everything; and the transvaluation has only to be made — the aim of life is to become like God. Religion could make the intellect the sign of God; philosophy in its turn could lend a logical intelligibility to God's workings.

The place of God in the universe was too obvious to permit his existence to be questioned in any intelligible sense. Even when his existence was proved, the logical proofs were usually only more definite illustrations and explorations of an accepted fact. The significant problem is the relation of God to the universe. Maimonides, indeed, takes up God's attributes first, then his existence, so that

existence becomes only an attribute of God and the least uncertain of them. All God's attributes, considering God in himself, existence, unity, life, omnipotence, omniscience, and the others, must merge to the extent that all multiplicity is excluded from them. The very essence of God includes his existence. The only question related to the attributes of God on which opposition was to develop in the middle ages was the question of how we come to know them and what significance they can have without endangering God's unity: clearly the attributes we assign to him do not indicate positive qualities distinct in him but are negations or signs of honor or have some undistinguished grounds in him; and though the debate was hot and constant, it was hardly questioned that God is, or that a plurality of attributes means (whatever their grounds in the nature of God) not that he is many, but that he acts, or he is represented, in many ways, and that he is characterized by his actions.¹⁶

Pure speculation furnishes warrant enough for the existence of God, and from such inferentially-ballasted belief in God, additional proofs strewn through all nature follow necessarily. The arguments shift easily from the realm of logic to evidences in fact. The differences of argument may be reduced ultimately to the question of whether they are derived primarily from Aristotle or are influenced more by the late neoplatonic contemplation of Unity. If the philosophy is markedly platonic the proper examination of the idea of God will be adduced as proof for his existence; if it is aristotelian, corroboration must be sought on the surfaces of life, for each existent thing and each actual event will be possible and conceivable only by a necessary nature. Most platonic philosophies will furnish a basis for cogent *a priori* proofs. Both Crescas and ibn Daud considered that God's existence was proved conclusively by the distinction between necessary and possible existence. But on the other hand, ibn Daud was also aristotelian enough to insist that this be supplemented with the proof by the necessity of a prime mover; ibn Zaddik began with the consideration of the contingency of the world; Saadia

¹⁶ For a discussion of the medieval background of this problem see H. A. Wolfson, "Spinoza on the Simplicity of Substance," (*Chronicon Spinozanum*, 1923), pp. 142-178.

and Bahya ibn Pakuda founded their proof on the fact that the world is composite. So there are logical manifestations and physical evidences of God in his world. Out of the unity which is God the manifold world proceeds according to the conditions of existence that just his being imposes on it. God is the principle of order and of law in the world of particular things. Joseph ibn Zaddik thought God must be single because the cause of many things must be one, and, consistent with that, he insisted that the study of theology be preceded by a knowledge of the sciences. Maimonides, too, held that a knowledge of physics and metaphysics was indispensable to a knowledge of God.

Yet the problem on which there was perhaps most variation in medieval Jewry was concerned with the way in which the world was related to God. The multitude of particular things could not be affected directly by this unity that is God; his efficacy had always to find some intermediary principle and usually the universe was formed in some graded hierarchy. Ibn Daud insisted that the world, to exist at all, had to exist in just the graduated series in which it actually does. But there is no general agreement among Jewish philosophers concerning the number or the nature of the interpositions which are necessary between unity and diversity: where the transition is made by neoplatonic emanations, as in the case of Maimonides, there are frequently ten stages. Yet there are elements that are fairly constant among the variations of the *schema* — the inclusive unity which is God, his defining intelligence (with sometimes the addition of a soul), Nature and the corporeal world. Sometimes the mediations between God and the world are accomplished by way of the attributes of God, eternal matter, and their modifications. Crescas, in this fashion, held that there was an infinite extension connected with and opposed to the infinite Intelligence of God. Extension was not itself body nor made up of parts, and there existed beside it an eternal matter which was qualified by it; the act of creation was only the ordering of this matter.

In some form or other, then, God is usually manifested in Nature, and the manifestation is such that the universe

by existing is essentially rational. To exist, a thing must be intelligible, for its existence depends on that rational relation to God which is the ground of intelligibility. Therefore not only is everything by its very essence capable of being known, but knowledge by that same fact is part of the world; each thing is so related to God that it aspires, as it were, to be known; nature, in man, grows into its own comprehension. Anything known is referred to God. There are moreover regularities in the processes by which things are altered in the sublunar world. Each time a law of nature or a concept of logic is discovered in experience, another indication of God has been noticed. Metaphysically he is the ultimate principle regulating all laws by only thinking all things. From that status, of course, it is clear that his attributes are difficult to name, since a universal principle would have no particular determinations by which it could be described. But logic was none the less to disclose him, for the logic of the jewish medieval philosophers was one they found in the world; it was no longer an aristotelian instrument applicable to the world; it was in things, and things were arranged in precise concatenations. The metaphysics of Aristotle had, by the exigencies of doctrinal monotheism and through the offices of neoplatonism, become a cosmology, and the *Organon* had come to lay the ground plans for a metaphysics. It was not that things were thought to exist in designated genus and species—these were abstract ideas and repudiated as such by most jewish philosophers—but there were accurate interrelations by which one thing was connected with another and implied by it. Ultimately they were embraced in the complete unity which was in turn implied by these interconnections. In this fashion Aristotle had been fitted to the neoplatonic universe. The process was undertaken somewhat earlier in jewish philosophy than in christian, for Aristotle was known earlier in the jewish than in the christian tradition; it was never perfected, since even in late scholasticism, Aristotle was known only imperfectly, by texts that were sometimes fragmentary and misconceived, often of an authenticity that was mythical, and always with the bias set rather by Avicenna and Averroës than by Aristotle.

An object, when God knows it, participates in the logical ordering of the universe, for it means precisely this for God to know. To insist that God knows all things is to maintain the complete intelligibility of the universe. All things exist with logical references to other things and to general principles. If God is the source of the Active Intellect by way of the Intelligence, as he frequently is in medieval jewish philosophy, it is he who gives content, on the one hand, to the rational powers of man, and on the other, endows sublunar nature with purpose and intelligence. It is natural that man, placed in that ordered world, be endowed with abilities to appreciate both the world and its order; so, he may consider individual things living each its life and undergoing its particular evolution, or he may contemplate the rational principles under which all the processes of growth and decay are arranged. He may reflect on things similar to himself and on creatures possessed of bodies like his own, developing his practical reason by such reflections, or he may face upward to the realm of pure rationality and receive wisdom from the angels, developing in that way his intellectual knowledge.

The beginning of man's existence is the beginning too of his knowledge, for he begins to think at the same moment and for the same reason that he begins to exist. His first knowledge is a sensitive knowledge of the bodies about him through the intermediary of his own body; he can be affected by anything like himself and he can not be insensitive to things that affect him. Whatever thing is similar to his body is potentially an object of his knowledge; since the human body is the most perfect one conceivable, it bears some similarity to all physical objects, hence nothing material is beyond the scope of man's knowledge. As ibn Daud put it, the soul is an indivisible form, the first entelechy of the natural body, arising in connection with the body and realizing and actualizing it. The soul of man is exactly suited to the mixture of elements which makes up his body. The early jewish philosophers held specifically that the human soul can arrive at a great development and a broad knowledge because the human body resembles all manners of plants and animals; in many statements the human body is a microcosm.

Man knows particular things through the encounters of his body with other bodies and through the sensations which are the result of those encounters. This is the beginning of his practical knowledge; by this means things may be known, their courses and sequences traced, and ways of controlling them discovered. In addition to this practical knowledge there are intellectual powers which the soul possesses through the perfection it shares with its body; it is elevated to such perfection that it is the form nearest the eternal forms and it can reach therefore to the system of significations which orders, like laws, the existence of things. The intellect is indebted to sensations and to bodily functions only for the initial ideas it acquires. Sensation and reason are as far apart as body and mind; their functions are as separate as the particular and the universal; sensation perceives the form of the individual thing, while the intellect, inspired by the data of sensation, apprehends the nature which makes things essentially what they are. Here again there is opportunity for disagreement between the platonist and the aristotelian, the former holding that all knowledge is derived directly in some fashion from universal ideas illumined or recalled in the soul, the latter that the intellect works over the data of sensation and abstracts its general ideas. But whatever the solution of that problem, there arise the different ways of knowing: practical knowledge from the fact that we meet and react to other individuals, intellectual knowledge from the fact that individuals are nevertheless intelligible and have meanings which derive from their place in the logical system. The intellect grasps truths immediately, while the practical intelligence forms precepts from experience. So the decision of the intellect concerns truth and falsity; the practical intellect pronounces a thing good and bad, and it can be good or bad, obviously, only as it affects some sensitive being; in the unity of the eternal being such an affection would have no place.

The acquired intellect depends then on the sensitive soul for its existence only; its manner of receiving knowledge is separate from it. It stands to the sensitive soul in much the relation that, until recently, the soul had stood to the body in modern philosophy. But in the middle ages

the distinction of the functions was marked more sharply. The intellect is not receptive in the manner that the senses are; it is not a function of the body. The act of reason is purely immaterial, a proceeding from premise to conclusion, or else wholly intuitive. Thinking is not done by means of corporeal organs, but just as there is a real and actual object to arouse the senses to perception, so there is an actual intelligible object to arouse the intellect to comprehension. Individual things could no more endow man's rational capacity with actual ideas than a surface could endow his sight with the sensation of color if there were no light. God or the Active Intellect is to the mind what light is to the senses, or to be aristotelian after another interpretation, the Active Intellect is the faculty by which sense experience is converted into concepts. So knowledge is possible: the senses are concerned with particular things and their accidents: there can be no knowledge of such things; but reason and intellect perceive essences and are concerned with the universal and the permanent.

The mind passes into actuality through the knowledge acquired from the Active Intellect; the birth of the soul is intellectual. Abraham ibn Daud resorts to the frequent metaphor comparing the soul to sight; without light vision is potential; light makes it actual. The Active Intellect makes the potential soul actual and gives it first the axioms which are universally certain and hence could not have originated from experience.¹⁷ The transition from imaginative or practical knowledge to intellectual knowledge is the origin of the soul. Now the mind can recognize the systematic unity which connects all things into one whole, for it comes upon not only ideas but an understanding of their relations one to the other. The principles of the universe are known through the same immaterial power by which they were set. God shows his efficacy at once in the logical principles by which things are understood and in the logical, or even teleological, ordering of events in their actual process. Particular souls exist only by virtue of a universal soul; particular minds can operate because a universal mind has set down the implications they discover in things. The world is intelligible only because

¹⁷ Cf. Husik, *History of Medieval Jewish Philosophy*, p. 222.

of the Intelligence whence all being absolutely and all intelligibility flow. The mind can know only by virtue of something analogous to it in the things it knows.

In the beginning, then, the soul is only a capacity, a potential intellect, which is so intimately connected with the body that it shares the body's mortality. Sensations, which are bodily activities, are the first intimations of knowledge, and by knowledge the soul comes into being, so that the beginning of knowledge is the first intimation of immortality. The rational soul can attain to the Active Intellect, and having thus become an actual intellect, no longer potential, it is dependent for its ideas, thenceforth, not on its body, but on the Intellect that is the ordering principle of the universe. The rational soul is identical with the ideas it has: that is to say, there is only one idea which is at once in the part and in the whole, in man's intellect and the infinite Intellect; that idea is equally and at the same time comprehended by man and present perfectly in the Active Intellect. The more perfect the soul becomes, the more closely it cleaves to the Active Intellect and fastens there on the logic of the universe and on all intelligibility, for the Active Intellect bears in itself the form of all existing and all possible things. Clearly this process of knowing must be immaterial; there can be no entrance of the body into logical sequences.

The aim of ethical endeavor becomes obvious: to return the soul to the upper world to which it belongs. All things in the world tend naturally to God, and intellect in man is the instrument which permits him to return most completely. So far as the soul succeeds in identifying itself with immaterial Ideas it is indestructible. The aim is obscured by the entrance of the soul into the body. But the body is a necessary incident in the biography of human knowledge; from the knowledge of individuals, which the soul has by its body, it is recalled to the higher knowledge of eternal truths and ceases to be dependent on the body, though its thinking began with it. Whether or not there could be adequate intuition of the absolute truth is a question on which neither arab nor jewish scholastics could agree; some philosophers, among them Maimonides, in-

sisted that God could not be known, others, like Avicenna, Algazali and ibn Tofail insisted that such knowledge was possible.

Whatever the solution to that problem, there was greater unanimity in the answers to the more significant problem of the relations of God's knowledge to man's. In God, thought, thinker, and object of thought are one. God knows all things before they come into existence and his knowledge does not change as things appear and disappear. But man in even his most perfect knowledge must remain an individual and so there must always be a separation of himself as subject from the object of his knowledge. Maimonides held that only the *absolutely* non-existent can not be known; things which only happen not to exist can be known since they have their being in God's knowledge and he brings them into reality. God is the cause of the phenomena which are the data of experience, and those phenomena follow according to the laws and principles of his knowledge. In man, on the contrary, knowledge follows from experience. God, knowing simply himself, knows all things, and all things conform to and illustrate the efficacy of that self-knowledge. The problem moreover of the relation of man's knowledge to the world has its answer in this action of God's knowledge.

But if God is omniscient man can hardly be free if freedom is to mean complete indetermination. God knows all things, but there was some hesitation concerning whether he could know the changing individual as well as the changeless principles that govern it. Evil in the world would seem in the presence of God's knowledge a criticism of his goodness, and if man is not free to choose how he will act, the punishment of his transgressions would seem to be little consistent with God's justice. Since it seemed possible to save God's goodness only at the expense of his wisdom, arch-rationalists did not hesitate to leave the opposition unsolved. Maimonides said that God was omniscient and man free, and that neither statement should be denied only because it, or the relation between it and the other, was not understood. Spinoza took a somewhat similar position in his defense of Des-

cartes's doctrine of the freedom of the soul. His position in his own works was from the first different: "the slavery of a thing," he says in the *Short Treatise*, "consists in its being subject to external causes, while freedom on the other hand consists in its not being subject to them but freed from them."¹⁸ According to Joël, the study of the philosophy of Crescas had brought him to a realization that God's omnipotence is incompatible with man's freedom.¹⁹ Crescas had solved the problem by curtailing the sense of human freedom. The act of will, he said, is in a sense free and in a sense contingent. It is not uncaused. With respect to itself it is contingent; but it is determined by its causes. The act of will, like any other act, is not fated to take place cause or no cause; if the cause is granted the act of will is necessary, but if the cause is removed it can not occur. Spinoza's conception was probably inspired by Crescas's statement, but still his emphasis, as in other problems, was distinct from that made in the middle ages. Moreover it was a conception which he held to from the first. Even in the *Short Treatise* he said that freedom is the power of the soul by which it is able to develop such ideas in itself and produce such results outside itself as correspond with its nature and the production of which is not altered by external interference.²⁰

The power which moves man through the world and permits him, too, to know, is the very nature of man; it is evidenced directly in desire, which is its motive power. Man can desire nothing — not even perfection — without first desiring to be. The rational man, to be sure, will seek to develop his reason, that he may identify himself as far as possible with the Intellect of God. To do that he must first control his bodily and more particularly his animal desires, for since he has a body as well as a soul, there must be ethical as well as intellectual virtues. The soul requires the body, for though it is not dependent on it for its knowledge, it is sustained by it in its present existence. One must live, have intercourse with one's fel-

¹⁸ *Short Treatise*, II, 26, note. p. 148.

¹⁹ M. Joël, *Don Chasdai Creskas' religionsphilosophische Lehren*, (Breslau, 1866), p. 54 f.

²⁰ See *Short Treatise*, II, 26, p. 148.

lows, and act kindly toward them, if one is to have tranquillity to develop the intellect unhampered by earthly concerns. The scale of virtues is ascended from ethical to intellectual excellence, hence the higher the perfection to which the intellect attains the greater the blessedness of the soul. Gersonides said, in philosophic-religious language, that the nearer a person is to the Active Intellect, the more he receives the divine Providence and Care. Beatitude comes with complete knowledge; the intuitive intelligibility of the universe is the gratification of full virtue; the reward of the soul is its identification with the World Soul, a perfection to which the soul attains according to Gabirol "without seeking, without effort, and without any other cause except its own essence, because it is full of perfection."²¹

Doctrines such as these and the discussions of them must have attracted Spinoza in his study of medieval jewish philosophy. It would be purposeless to try to determine from which of them specifically his own thought developed. It is safe to assume that he knew them. Certainly he took up problems that are noticeably similar. His solutions are not always precisely these, but then, almost every doctrine that has been outlined in the preceding paragraphs in the name of jewish philosophy could be contradicted by some specific text from some philosopher. A comprehensive statement of medieval jewish philosophy could no more be made than a comprehensive statement of modern philosophy, and for precisely the same reason that contradictions could be found at every point. Even so general an outline is no more than broadly congruent with Spinoza's conceptions. Spinoza's position was unorthodox in many questions, some of them important ones — the creation of the world in time, prophecy, miracles, God's knowledge, his providence, and his attributes, the freedom of the will, the immortality of the soul, rewards, and punishments. But his departures too could be fitted into some orthodoxy if care and erudition were to be employed so poorly. Many of Spinoza's novelties were anticipated within the hebrew tradition. Ibn Ezra, ibn

²¹ *Fons Vitæ*, III, in Baeumker's *Beiträge zur Geschichte der Philosophie des Mittelalters*, vol. I.

Gabirol, and Gersonides denied creation *ex nihilo*; the latter two maintained the eternity of matter. Crescas held that God had an attribute of extension, and denied the validity of final causes; like ibn Ezra he taught complete determinism. Some of the jewish mystics held that Nature is animated. Maimonides denied personal immortality, insisting instead on the immortality of the single Active Intellect; he also taught the relativity of good and evil. Then too, other influences than medieval jewish philosophy entered into the formation of Spinoza's thought; and the logical development he sought required for the solution of his problems mechanisms to which considerations of orthodoxy are irrelevant.²²

III

SPINOZA was, then, acquainted with medieval jewish philosophy; concerning his possible knowledge of the philosophy of the medieval christians there are grounds only for conjecture.²³ It would be easy to find analogies between the philosophy he expounded and that of many christians, so that, in lieu of medieval jewish philosophy, problems in their cognate christian development would illustrate Spinoza's thought rather more clearly than philosophic speculations of a later day. Thus Spinoza held that God is the immanent and not the transient cause of all things²⁴ basing that statement elsewhere on the authority of St. Paul and the ancient Hebrews.²⁵ It was a doctrine which is not unfamiliar to St. Thomas Aquinas; the perfections of all things, he said, are in God, even when the powers and qualities of those things are mutually incompatible, in such wise that though they are diverse and opposed in themselves, they preëxist in God

²² Professor Harry Wolfson has announced a book to be entitled *Spinoza, the Last of the Medievals*, which will take up the detail of the medieval antecedents of Spinoza. Four very illuminating chapters have already appeared in the first four numbers of the *Chronicon Spinozanum*.

²³ See Freudenthal, *Spinoza und die Scholastik*, in *Philosophische Aufsätze*, Leipzig, 1887, pp. 85-138.

²⁴ *Eth.* I, 18; II, 63.

²⁵ *Epistola LXXIII* (*olim 21*) to Oldenburg; IV, 307.

as one without detriment to God's simplicity.²⁶ But it is a doctrine that is found equally in Maimonides, and from Maimonides the derivation seems to lead back to Averroës. It is inevitable that Spinoza should bear some striking resemblances to christian philosophers.²⁷ The influences that went into the making of christian scholasticism were identical with those that entered jewish; in addition there are direct influences of jewish philosophy on christian — Gabirol was widely known to christian philosophers and Aquinas and others were influenced directly by at least Maimonides.²⁸ Further examination would encounter great difficulties and would most probably clarify nothing.

No more is known about Spinoza's possible knowledge of ancient than of medieval christian philosophers. His

²⁶ *Sum. Theo.* Ia, qu. 4, art. 2.

²⁷ There is a mention of Aquinas in the *Short Treatise*, Pt. I, ch. I, p. 20, in relation to the *a priori* argument for the existence of God: "Hence one need not attach much importance to the saying of Thomas Aquinas, namely, that God could not be proved *a priori* because he, forsooth, has no cause." This argument is repeated, without the name of Aquinas, Pt. I, ch. VII, p. 53. But these citations are arguments against rather than for Spinoza's acquaintance with the *Summa Theologica*: the misconstruction of Aquinas's idea is so gross that it can be explained only by the supposition that Spinoza's knowledge of the doctrine must be second-hand and extremely casual. This is the more clearly the case since in Pt. II, ch. XXIX, p. 142, Spinoza touches on Aquinas's real argument but without mentioning his name or seeming to know it is his. Aquinas had said, "*Dico ergo quod hæc propositio, Deus est, quantum in se est, per se nota est; quia prædictum est idem cum subjecto. Deus enim est suum esse, ut infra patebit. Sed quia nos non scimus de Deo quid est, non est nobis per se nota, sed indiget demonstrari per ea quæ sunt magis nota quoad nos, et minus nota quoad naturam, scilicet per effectum.*" (*Sum. Theo.* Pars Ia, qu. II art. 1, resp. dic. Other references to the argument *a priori* are in the same vein. See *Commentum. IV Sent.*, I, I, dist. III, art. 2, ad 4um, and *Quæst. disp. de Veritate, quæst. X, art. 12, ad 2um*, and especially *Super Boeth. De Trinitate, quæst. 1, art. 3, ad 6um*, — *Ad sextum dicendum quod Deum esse, quantum est in se, est per se notum, quia sua essentia est suum esse; et hoc modo loquitur Anselmus; non autem nobis, qui ejus essentiam non videmus. Sed tamen ejus cognitio nobis innata dicitur esse inquantum per principia nobis innata de facili percipere possumus Deum esse.* Spinoza argues (p. 142) that it is impossible to know God through something else, (1) because then something else would be better known than God, (2) because it is impossible to inter an infinite from a finite thing. There is a mention of the Thomists (*Short Treatise*, Pt. I, ch. VIII, p. 56) where Spinoza objects to their conception of a transcendent God, but it is possible that Spinoza saw his Thomists by way of the criticisms of Cartesians. Freudenthal, however, is convinced that Spinoza had read Aquinas; "*Von neueren Philosophen hat er sicherlich Thomas und Thomisten, Descartes, Bacon, Hobbes Heereboord und wahrscheinlich Bruno gelesen.*" *Spinoza und die Scholastik*, p. 137.

²⁸ Cr. Husik, *A History of Medieval Jewish Philosophy*, p. 306; Et. Gilson, *Le Thomisme* (Paris, 1923), p. 20.

library contains only few works by ancient philosophers. Of Aristotle only the *Rhetoric* appears;²⁹ the *Enchiridion* of Epictetus is there;³⁰ Seneca is represented by his letters (two editions, one latin, one dutch) and his tragedies;³¹ Cicero by his letters;³² Lucian by the *Mortuorium Dialogi*.³³ Very little can be judged of his indebtedness from his works. His references to Aristotle, for example, could all have been made either without knowing Aristotle or knowing only the *Rhetoric*; at most some acquaintance with the *Metaphysics* might be added. Thus in the *Short Treatise* he mentions Aristotle's definition of a dog as a barking animal³⁴ and he calls attention too to the fact that Aristotle defined desire as a genus containing two species.³⁵ In the *Cogitata Metaphysica* he quotes Aristotle's *de Respiratione*, Bk. I, 8 for a definition of life as a continuance of the support of the soul with heat, and the *Metaphysics*, Bk. II, 7 for a definition of life peculiar to the mind, as the operation of the intellect.³⁶ Any of these citations might be accounted for by scholastic tradition: definitions from Aristotle were common property in the middle ages; the definitions of life occur in a chapter on the life of God, which was so common a subject of discussion in the middle ages that Spinoza could easily have gotten the exact wording and precise references without knowing the original; particularly the case of Aristotle's distinction of the native faculty into rational and irrational desire can be accounted for without enlarging Spinoza's library—it occurs in the *Rhetoric* and Spinoza probably had it from that source.³⁷ There is also the famous passage,³⁸ in which Spinoza says that the authority of Plato, Aristotle, and Socrates has no weight with him, but speaks with some respect though no more defi-

²⁹ *Inventaire*, p. 127; Freudenthal no. 8.

³⁰ *Inventaire*, p. 172; Freudenthal no. 89.

³¹ *Inventaire*, pp. 180, 188, 192; Freudenthal nos. 105, 128, 137.

³² *Inventaire*, p. 194; Freudenthal no. 146.

³³ *Inventaire*, p. 178; Freudenthal no. 101.

³⁴ Pt. II, ch. III, p. 70, note †.

³⁵ Pt. II, ch. XVII, p. 112.

³⁶ *Cog. Met.* Pt. II, 6; I, 259.

³⁷ *Rhetoric* I, x; Wolf points out (*Short Treatise*, p. 225) that the distinction occurs also in the *De Anima*, III, ix and III, x.

³⁸ *Epistola* LVI (olim 60) to Boxel; IV, 261-262.

nately of Epicurus, Democritus, and Lucretius. It is difficult to understand, however, how that statement could be taken to indicate his acquaintance with the works of any of the philosophers mentioned. Some similarities in the political theories of Spinoza and Aristotle can be explained by the intermediary of Machiavelli, a copy of whose work was in the possession of Spinoza³⁹ and from whose *Discourses on Livy* he quotes.⁴⁰ Ovid is quoted rather frequently, but always in what had become almost catch phrases in the middle ages: "As lovers let us hope and fear alike; he is of iron who loves what another leaves;"⁴¹ "I see and approve the better; I follow the worse."⁴² There is the echo of the *Amores* III, iv, 17, in the *Political Treatise* X, 5; III, 355 — we strive always for that which is forbidden and we desire what is denied. The Stoics are mentioned in the *Preface* to Book V of the *Ethics* (II, 277); and an aphorism of Seneca's to the effect that violent dominion does not endure long is quoted in the *Theologico-Political Treatise*.⁴³ Cicero is quoted⁴⁴ to the effect that the very best men are guided by glory, and even philosophers who write books insisting that glory be despised affix their names to their books, and again⁴⁵ to the effect that the tumor (rumor?) of a dictator was displeasing to the good, and again⁴⁶ on the title page of the *Iridis Computatio Algebraica*. Sallust is quoted on dominion, from what was supposed to be his first oration to Cæsar.⁴⁷ For the rest, his use of the ancient philosophers is almost entirely on the legendary level, such as the story of Thales's amassing a fortune by monopoly of oil-mills after he had foreseen a good season for olives,⁴⁸ or the death of Seneca,⁴⁹ or Socrates's beating his slave for the good of the slave.⁵⁰

³⁹ *Inventaire*, 144; Freudenthal no. 38.

⁴⁰ *Polit.* X, 1; III, 353.

⁴¹ *Amores*, lib. 2, eleg. 19, vs. 4-5 quoted in *Eth.* III, 31, cor.; II, 164.

⁴² *Metam.* VII, 20; quoted *Eth.* IV, 17, sch.; II, 221.

⁴³ *Theo. Pol.* XVI; III, 194.

⁴⁴ *Tuscul. disput.* I, cap. 15; *Eth.* III, def. 44; II, 202.

⁴⁵ *Cic. ad Quint. Grat.*, III, 8; *Polit.* X, 1; III, 354.

⁴⁶ From the *Tuscul. disp.* lib. I, in princ.

⁴⁷ *Cap.* I, sect. 4; *Polit.* VII, 5; III, 309.

⁴⁸ *Epistola* XLIV (olim 47) to Jelles; IV, p. 229; cf. Diogenes Laertius, *Lives*, I, 26.

⁴⁹ *Eth.*, IV, 20, sch.; II, 224.

⁵⁰ *Short Treatise*, Pt. II, ch. VI, p. 82.

As in the case of Aquinas, it would be easy to find quotations in Bruno that might be compared strikingly with passages in Spinoza. Spinoza's critics, in fact, have shown considerable unanimity and insistence in discovering traces of Bruno's influence in Spinoza's works.⁵¹ It is natural that there be this similarity, particularly since in Bruno's philosophy a naturalistic interest in man and the world gave new emphases to the old neoplatonic ordering of the world. The inquiry is somewhat more concerned with Nature than with God, so that the two, Nature and God, can be identified, and since the renaissance still went, for the most part, to Aristotle for its knowledge of Nature, there is much of Aristotle in the philosophy. Certainly there are striking similarities in Bruno's and Spinoza's statements; the central purpose and conception of their philosophies are the same. All things flow from and are controlled in a unified reality which is self-contained and self-sufficient since it alone gives meaning and existence to all the universe. It is a unity that embraces the whole of things, but it is present also, as a principle must be present whenever it is exemplified, in everything.⁵² The world exists by the instrumentality of this reality, and the world can be known because of the logic in which it orders things.

⁵¹ Bayle was perhaps the first to note the similarity (*Dictionnaire*, article *Brunus*). Sigwart (*Neuent. Tract.*) and Avenarius (*Die beiden ersten Phasen des spinozischen Pantheismus*) are convinced that the *Short Treatise* could have been written only after a perusal of the *de la Causa, Principio et Uno* and the *de l'Infinito, Universo et Mondi*. Pollock (*Spinoza, his Life and Philosophy*, p. 97) contributes an attempt to lend verisimilitude to this opinion by the conjecture that van den Ende might have introduced Spinoza to Bruno's writings; in this he is followed by Wolf (*Short Treatise*, p. cxxvi). Couchoud (*Benoît de Spinoza*, 2ième édition, Paris, 1924, pp. 8-10) supposes that it might have been Morteira who performed that service. Couchoud considers the influence only hypothetical, (*Ces lectures italiennes furent sans doute la poésie de sa vie clericale.*) Martineau holds that the resemblances are superficial and illusory (*Study of Spinoza*, p. 190, note 2), and Wolf (p. 183) grants that they are by no means fundamental. But for Dr. Lovejoy the conviction that Spinoza was influenced by Bruno mounts to a certainty (*The Dialectic of Bruno and Spinoza*, University of California Publications, 1904, p. 167, — "Since we know that Spinoza read Bruno" . . . but there is no statement of how that is known.) J. Lewis McIntyre, *Giordano Bruno* (London, 1903), is satisfied only to note resemblances, although with Carrière as authority (*Weltanschauung der Reformationszeit*) he insists on mutual evaluations that glorify Bruno at the expense of Spinoza. John Caird, *Spinoza* (Edinburgh, 1888), pp. 75-90, is carefully non-committal except in statements of resemblance.

⁵² "When one considers an individual man, a particular substance is not considered but Substance under particular traits." *De la Causa*, ch. V.

The manner, however, in which the two philosophers state the conception they share is wholly different: Spinoza always carefully logical and mathematically coherent; Bruno carried constantly to enthusiastic and rhetorical outbursts. But for both, the world was in a sense — as Bruno stated it to be — an infinite living organism, not created by any outward cause, but having the principles of all its existences and all its activities within itself. And the end which both philosophers hold to be the highest within man's aspiration is "an understanding of the manner in which the world has power for all, produces all, is all in all, and how the infinite variety of particular things constitutes in itself and by itself but one single and identical being. To know this unity is the end of all philosophy, of all knowledge of nature."⁵³

All being, according to Bruno, proceeds from the Infinite. The Infinite is essentially rational and orders things in the world, disposing them in the same manner as the human reason connects its ideas. "The universal intellect is related to the production of natural things as our intellect is related to the congruous production of rational species."⁵⁴ The individual thing and its disposition in its environment are seen by the "sensuous eye;" the logical thing and its reasonable concatenations are recognized by the "eye of reason." Only by our rational powers we come to know of the Infinite which disposes of things; "we can convince ourselves of the existence of this basis of all natural things through the reason alone."⁵⁵ Unlike Spinoza, Bruno was convinced that this infinite basis of things is itself unintelligible to us. "This absolute activity which is the same as the absolute potentiality, cannot be comprehended by the intellect, except by way of negation . . . for the intellect, when it would understand, is obliged to have recourse to some intelligible form (*specie intelligibile*), and to treat the idea (of the Absolute) as comparable and commensurable and capable of being made equal to itself; but this is impossible. There is no light therefore which can approach or have access to this supreme

⁵³ *De la Causa*, Dial. 4.

⁵⁴ *De la Causa*, Dial. 2.

⁵⁵ *De la Causa*, Dial. 3.

light, this so profound abyss.”⁵⁶ The difference between them on this point is not a different conception of the function of reason; to be sure Spinoza seems to have conceived its powers to be greater than Bruno did, but the essential difference is that he insisted that there was a type of cognition higher than reason—intuition. Intuition could succeed in knowing the infinite source of being and of rationality. Its accomplishment in knowing, moreover, was possible without lowering the dignity and elevation of the Infinite it knew. Knowing the true Idea the intellect identified itself with that idea and joined itself to God, suffering thenceforward no division from him, since the Idea from that time was at once in the Divine Intelligence and in the human mind. Both Bruno and Spinoza denied the existence of abstract universals; only the concrete particular which is encountered in experience and the concrete intelligible which is known to the mind are able to be.⁵⁷

All finite things have the same basis of being; one thing differs from another, not in being, but only in the manner of its being. The single substance of things, though it can not be made diverse, can be diversely manifested and figured. Substance remains the same while the modes and variety of being go through the production of multiform variations.⁵⁸ All individual things are aspects and modes of the eternal substance, and substance finds in them partial and imperfect expression. “All individuals, howsoever diverse be their manner, participate in a single identical being. The universe, on the contrary, embraces not merely all beings but all manners of being; it is and it comprehends all the modifications of substance while it itself remains always the same . . . All that appears as

⁵⁶ *De la Causa*, Dial. 3.

⁵⁷ The similarity of their doctrines on this point as on others need not indicate that Spinoza knew Bruno, for this doctrine was common in medieval philosophy. See, for example, Maimonides, *Guide for the Perplexed*, III, xviii; trans. by Friedländer, pp. 289–290. “It is an established fact that species have no existence except in our own minds. Species and other classes are merely ideas formed in our minds, while everything in real existence is an individual object, or an aggregate of individual objects. . . . It is wrong to say that Divine Providence extends only to the species, and not to individual beings, as some philosophers teach. For only individual beings have real existence; and individual beings are endowed with Divine Intellect; Divine Providence acts, therefore, on these individual beings.”

⁵⁸ See *de la Causa*, Dial. 5.

difference in bodies, with respect to form and so forth, is naught but a differing aspect of the same substance — an aspect, frail, changeful, corruptible, of one immutable, everlasting and eternal being . . . All that constitutes diversity, all that consists in generation, corruption, alteration and change is not entity, is not Being, but is a condition and circumstance of Being, which is one.”⁵⁹

Thought is not metaphysically distinct from extension for either Bruno or Spinoza. Knowledge is possible only by virtue of their substantial identification. The mind is not alien in a physical world, but it finds an order in things which is analogous to, and therefore susceptible of treatment by, its own logic, and so it is able to proceed to a knowledge of the final principles of things. Love is directed toward the object of knowledge and grows with the perfecting of the intellect and with the deepening of the understanding. The fullest love must be aroused by the most perfect being which man can succeed in knowing; that being is the source of all being. “The supreme good, the absolute perfection, the complete beatitude consists in the unity that embraces the whole.”⁶⁰ The token of man’s immortality is in the possibility of knowledge and love of such an embracing unity. But there is a distinction between the doctrine as Bruno held it and as Spinoza held it. Sigwart points out that “Bruno deduces from the immortality of man the possibility of a love that increases infinitely; while for Spinoza, on the contrary, the infinitely increasing love of God is a ground for the proof of immortality.”⁶¹ Moreover since Spinoza held and Bruno denied that man can attain to a knowledge of God, though the difference is not a sharp one, there must be a disparity at least as great in the beatitude as in the knowledge which

⁵⁹ *De Immenso et Innumerabilibus*, I, 9.

⁶⁰ *De la Causa*, Dial. 5.

⁶¹ Sigwart, *Neuent. Tract.* p. 129. Further diverting speculations concerning the possible origin of Spinoza’s doctrine of love have been based on the fact that a Spanish translation of the *Dialogues of Love* of Juda Abrabanel (Leon Hebreu) was found in his library. (*Inventaire*, p. 152; Freudenthal no. 48; See selections from the *Dialogues*, *Chronicon Spinozanum*, vol. I, pp. 235–259.) The *Dialogues* are concerned with a detailed examination of the nature of love and its causes. Love is distinguished from desire; the two loves are examined — the sensual love which grows from desire, the intellectual love which gives rise to desires; there is a consideration of man’s love for man, his love for God, and God’s love for himself.

is possible according to the two philosophers. But it is difficult to be certain of the doctrines stated in Bruno's florid and poetic language. Logical distinctions are kept more sharply marked in Spinoza; he never falls into the confusion which seems frequent in Bruno, of the conception of Nature as the eternal unity of principles that gives being and meaning to things, with the conception of Nature as the totality of finite things which move in an eternal and infinite sequence: yet he never is in a necessity of enforcing that distinction by making God transient rather than immanent and thus separating the cause more sharply from its consequences. Bruno on the contrary wavers between the two. Spinoza can, therefore, be quoted more accurately, both in metaphysics and psychology, and it is dangerous to draw conclusions from any similarities observed between his writings and those of Bruno.

This much of Spinoza's background could be explained easily by his jewish training and his early associations. It seems safe to assume that his thought had already shaped itself characteristically and that the total universe had taken its form in his conception when he withdrew from the jewish community. His studies after his excommunication from the synagogue contributed to the modification of the aristotelian descriptions of the changing world which fitted in the neoplatonic frame his system had taken on. All the science his predecessors had had was aristotelian, and arabic and jewish developments from Aristotle; he could add the results of the natural sciences to confirm and supplement Aristotle and to fill more fully the lower part of the triangle of the world descended out of God. His association with Franz van den Ende doubtless opened the literature of the latin language to him and admitted him directly to Descartes.⁶² Whatever he took from modern

⁶² It has been supposed that his life in protestant Holland exposed him definitely to still other influences; Couchoud insists, for example, that one "reconnait surtout l'influence des Jeunes Scolastiques, en grande vogue alors aux Pays-Bas: Suarez, Martini, J. C. Scaliger, Toletus, Pereira, Mendoza, Eustachius et les Coimbrois. Les Professeurs protestants Burgersdijck, Heereboort, s'en inspiraient beaucoup. Les *Cogitata Metaphysica* de Spinoza sont en partie dirigés contre eux." (*Benoît de Spinoza*, p. 15, note 1.) For authority he cites Freudenthal, *Spinoza und die Scholastik*, 1887. Cf. Wolf. *Short Treatise*, Introduction, p. xxxi. Van den Ende, of course, can be made the intermediary if one is needed to any of these.

sources he could assimilate easily into the system of things as he had begun to conceive it. Aristotle, whatever opinion Spinoza entertained of him specifically, had in the course of the middle ages made a place for science in a world derived out of God and comprehended and explained in a unity; no discovery of science could alter the principles of explanation and logic. So the problems Spinoza considered revolve about predilections which, since later philosophy has turned from them, continue to be medieval. His faith in the unity of all things, in the complete intelligibility of the universe, and in the existence of intelligible forms by virtue of which knowledge is possible, these were not preoccupations on which the new philosophy prided itself.

There will be the proper place in the discussion of Spinoza's works to take up the influence on him of contemporary philosophy and science. Just as his similarity, in some doctrines, to almost any of his predecessors might be urged, so too he might have been influenced by any of the philosophers contemporary with him and, in fact, there are few whose influence has not been advanced particularly by some critics.⁶³ But as will be evident in the examination of his relation to Descartes, there is need for caution in even the strongest case, and if there are valid grounds, despite the cartesian look of some of Spinoza's philosophic statements, for Spinoza's insistence that he holds in most problems of philosophic importance, doctrines contrary to those of Descartes, there are grounds too for definite distinction of his thought from that of other of his contemporaries.

In some instances the parallel is striking. The ethics and politics of Hobbes might be attached easily to Spinoza's metaphysics, and if careful considerations be stated, one might show that the *Ethics* is wholly consistent with the reduction which Hobbes makes of all real processes to motions and with the conception, which he defends, of bod-

⁶³ Starcke, *Spinoza*, pp. 65-67, draws the comparison between Spinoza and Telesio in that, at least, they both insisted on a systematic criticism of scholastic methods of knowledge. Richter, *Spinozas Philosophische Terminologie*, pp. 112-116, asserts Spinoza's dependence on Arnold Geulincx.

ies as composed of small parts which are never absolutely indivisible. There is however little more than similarity, while for other doctrines, those of the natural state of man, of the laws of Nature, of religion, of right, wrong and punishment, there is additional presupposition, since Spinoza left a copy of *De Cive* in his library. Moreover, at the request of a correspondent he went to the trouble of pointing out the differences he introduced into political theory.⁶⁴ Hobbes establishes an absolute sovereignty at the formation of the state, whereas Spinoza preserves the natural right always intact and the power of the chief magistrates in every state is always commensurate with the excess of their power over that of their subjects. Briefly, Spinoza preserves the state of nature in the civil state, while Hobbes held that natural right was abrogated by the formation of the commonwealth.

Spinoza's philosophy is to be interpreted then in terms of the earlier philosophies to which it forms a fitting coping-stone, rather than in terms of subsequent philosophies which it in no sense anticipated or of philosophies contemporary with it to which it was antagonistic. In any other light than that of its history, his philosophy seems little more than a confused and hardly explicable pause at the head of what was to develop into modern thought, antipodal to Bacon, anathema to Leibniz and an object of scornful neglect for the British epistemologists. Even the common meanings for the words Spinoza used have come to be established by the works of these philosophers. If what Newton meant by matter or what Locke meant by idea or what Hume meant by cause be read into Spinoza's use of those terms, his philosophy is inevitably filled with mystifying confusions. Unfortunately readers forgot the medieval meanings of words when philosophers turned in the seventeenth century in distaste and ignorance away from things medieval. Spinoza could not have foreseen what was to develop from the fact that science had become experimental, nor could he have anticipated that philosophy was to become epistemological. When the interest of philosophy was turned to discovering functions and analyzing them, terminology had to take on modified mean-

⁶⁴ *Epistola* L to Jelles; IV, 238.

ings, for the old terminology had been constructed to formulate the rationality that lies behind phenomena and to express the logical interconnections which are implied between things. Spinoza could not know that the cartesian distinction of body and mind was to wipe out the aristotelian distinction of matter and form; if he could have thought of it in those terms he might have hoped that his treatment of extension and thought be confused with neither, or at least that it be recognized to be nearer to Aristotle than to Descartes.

Historical accidents have set Spinoza aside among the movements from which modern philosophy grew, so that, if he is understood even enough to be differentiated from his contemporaries, he stands with formidable massiveness at the close of the middle ages — much as Aristotle stands at their beginning. For all the distaste he expressed for Aristotle, his philosophy draws largely from the modified aristotelianism that came from the middle ages in a neoplatonic casing. But medieval thought had operated at least one sweeping transformation; the notion which had gone into the middle ages of a universe that is logically classifiable, emerged in the final conception of a universe completely classified. In the whole tradition, thanks to its neoplatonism, the basis of logic is in metaphysics and the human mind is the natural inhabitant and interpreter of the world; it is difficult to decide whether there is a change in the tradition when the emphasis is placed on the world to be contemplated in the intelligible laws of God's mind. Logical cogencies and physical necessities were not unrelated, and all — the laws of nature and those of the understanding — were included in laws which were more embracing and which were finally themselves embraced in the being of God. The two thousand years of modification between the *Ethics* of Aristotle and the *Ethics* of Spinoza accomplished in this respect nothing of radical importance: the process that leads from the rational ideal of *eudaimonia* to the rational ideal of the intellectual love of God is not a long one, and the affinities are numerous between these two systems of morals which are concerned first with human perfection and then, only in relation to it, with right conduct. But the processes and

the problems of the intervening years are important to the understanding of the later philosophy. It is through them that the metaphysical vision of the *Ethics* is possible, and they helped formulate, too, the methods of thought and action that would lie appropriately within that vision.

CHAPTER II

THE SHORT TREATISE

I

DESPITE the evidences in Spinoza's philosophy that the one central idea and the one dominant purpose, about which it was developed, was there from the first, and is apparent consequently at each point and epoch, it will be impossible to follow a sequence of development in the expression of it. The history of Spinoza's thought can be determined only in a general way, and there are few definite stages of progress to be marked. Spinoza's writings can be dated approximately. But they have all clearly been worked over so much and the dates overlap by so wide a margin that it would be pointless to try to mark off strata of thought in them. The progress of his thought, moreover, was an exploration of the implications of his fundamental convictions. Therefore it is marked, not by theories stated and then abandoned, but by the deepening of conclusions he had expressed imperfectly and by the discovery of formulæ he had always sought. At most it can be known only that certain doctrines were put forward in certain forms within some few years and that other doctrines were to find more precise formulations after a period of years in later works. Even in the case of the letters where we are more fortunate so far as dates are concerned, we are limited by having, for the most part, only truncated versions of what his first editors decided were the essential and philosophic parts of his letters.¹ There is very little here to help in laying out the march

¹ Present editions contain not merely the letters of the original edition but also letters and fragments of letters discovered and published by Van Vloten, *Ad Benedicti de Spinoza opera quæ supersunt omnia supplementum*, Amsterdam, 1862. These were found in the orphan asylum at Amsterdam, where the first editors worked, and are marked with notes by them; the excluded bits were consequently omitted deliberately.

of Spinoza's ideas: the progress is through the *Short Treatise* and the *Principles of Descartes's Philosophy* until, in the *Correction of the Understanding*, the *Ethics* and the *Theologico-Political* and *Political Treatises*, his philosophy is grouped in ideas that are intellectually almost contemporaneous; but even these latter writings are spread over a period of almost sixteen years.²

² Letter VI to Oldenburg (IV, 36) seems to refer to the *Correction of the Understanding* and seems to indicate that it was almost finished at the date of the letter (1661): *quod autem ad novam tuam questionem attinet. quomodo scilicet res caperint esse, et quo nexu a prima causa dependeant: de hac re et etiam de emendatione intellectus integrum opusculum composui, in cujus descriptione, et emendatione occupatus sum. Sed aliquando ab opere desisto, quia nondum ullum certum habeo consilium circa ejus editionem, timeo nimirum ne theologi nostri temporis offendantur, et quo solent odio, in me, qui rixas prorsus horreo, invehantur.* The supposition that the reference is to the *Treatise on the Correction of the Understanding* is based entirely on the similarity of an expression in the letter to the title of the treatise. Certainly the description fits the *Short Treatise* better, since the *Correction of the Understanding* does not contain a description of "how things began to be and by what bond they depend on the first cause"; the *Short Treatise* does, and chapters XXI and XXII of Part II might well be thought to describe specifically the correction of the understanding; Spinoza seems in fact to have designed the *Short Treatise* and certainly the *Ethics* to the end of correcting the understanding; the phrase *de emendatione intellectus* might easily have occurred to him independently of the precise ideas which he was to unite in the treatise which bears that name. Moreover the dangers of criticism by theologians in the case of the *Short Treatise* are obvious; there is little ground for fear in the *Correction of the Understanding*. Wolf (*Spinoza's Short Treatise*, London, 1910; pages lxi and cxxiii ff.) considers the reference to apply to both works, that the *Short Treatise* was at this time practically finished and the *Correction of the Understanding* only in project and in a very fragmentary state.

The *Short Treatise* is the earliest work we have of Spinoza. Avenarius thought it was very youthful, that the dialogues at the end of Chapter II of Part I were written about 1652 and the main text in 1654 or 1655. Freudenthal holds that it was composed between 1658 and 1660; Wolf concurs with that view, insisting that it could not have been finished before 1660, though some additions might have been made after that date, that, at the other extreme, some of its views date from before his excommunication (1656), and that it was definitely completed by 1661. Letter XI (*olim* 8) from Oldenburg (April 3, 1663; IV, 51) contains an inquiry concerning the opusculum in which Spinoza "treats of the beginning of things, of their dependence on the first cause as well of the correction of our understanding."

The *Principles of Descartes's Philosophy* was published in 1663. It took its origin from Spinoza's effort to teach philosophy to Johannes Casearius, a young student of theology of the University of Leyden. Since Casearius came to Rijnsburg to stay at the house in which Spinoza lived in 1662, or at earliest in the winter of 1661; the beginning as well as the culmination of the project in the publication of the book is nicely dated.

If the *Correction of the Understanding* existed as a project and a title in 1661, plans for the *Ethics* were probably being formed about the same period. Beginnings of it might be seen in the experiment in the geometric form which Spinoza appended to the *Short Treatise*. By 1663 at least part of the First Book had been submitted to his friends in Amsterdam. Letter VIII (*olim* 26) from Simon de Vries (February 1663; IV, 40) raises a question concerning the third definition and quotes it in almost its present form; the substantial meaning of

One can look confidently, therefore, to the *Short Treatise* for the earliest expression of Spinoza's thought. The fact that even in that work there are parts of varying antiquity will not alter its usefulness for indicating the general development.³ Whether or not the dialogues are the oldest writing of Spinoza, they belong, at the widest con-

the fourth definition is indicated too. The *Principles of Descartes's Philosophy* (and the *Metaphysical Reflections*) were consequently published after work had been begun on the *Correction of the Understanding* and the *Ethics*. By June, 1665 he was at work on the Third Part (which includes the subject matter at present united in Books III and IV) and he had completed at least eighty propositions (*Epistola XXVIII* to John Bouwmeester; IV, 163). In September, 1665, Oldenburg speaks of Spinoza's having turned from philosophizing to theologizing, concerning himself with angels, prophecy and miracles. (*Epistola XXIX*; IV, 165). In his reply to that letter, Spinoza writes that he is at work on a treatise on the Scriptures. He has evidently put the *Ethics* aside for the *Theologico-Political Treatise*, and he seems to have been at work on that for the next four years. It was published anonymously in 1670. After that he returned to the *Ethics* which reached a form in which he considered publishing it in 1675. Meanwhile from the researches of the *Theologico-Political Treatise* he had turned to the subjects of the *Hebrew Grammar* and the *Political Treatise*; both of these works were left unfinished. The essays *On the Rainbow* and *On the Calculation of Chances* probably belong to this later period too.

Besides these enterprises he undertook to translate the *Old Testament* into Dutch and had succeeded, if we are to believe his biographer, to the extent of translating the five books of Moses. But he was dissatisfied with the result and burned the manuscript some days before his death. (Cf. Colerus, in Freudenthal, *Lebensgeschichte* p. 83.) There seems also to be indications that he had returned during this period to mathematics and physics with the intention of writing a work on natural philosophy to supplement the *Ethics*. (See Wolf, *Short Treatise*, p. lxxxiv.) He wanted also to write on the principles of algebra. Neither project seems to have been carried out even partially.

³ The two dialogues placed at the end of Chapter II of Part I were for a long time considered to be the oldest writing we have of Spinoza. Sigwart, however, felt that whereas the first dialogue must have been written before the *Short Treatise*, the second might have been written after it. Freudenthal goes further to insist, that they must both have been written after the *Short Treatise*, since they are unintelligible without certain ideas that are expressed in it and conceivably they might have been written to elucidate some problems suggested by it. This is somewhat too much; the dialogues are philosophic dialogues, and rather difficult ones, consequently some knowledge of philosophy is required for an understanding of them, but the terms used and the distinctions made are not in the least peculiar to Spinoza; even a cursory acquaintance with scholastic philosophy will make them intelligible; they are indeed not unfamiliar to Aristotle. It might be further relevant to point out that the dialogues presuppose still other ideas which are not elucidated elsewhere in the *Treatise*, so that it is difficult to be sure that conclusions concerning the age of the dialogues can be based on these considerations. All of Spinoza's works are fragmentary and only supplementary in this sense, and certainly even the *Short Treatise* is clearer in terms of the ideas expressed later in the *Ethics* and elsewhere. It would be difficult to build the sequence of his writings if each part of them could be given a place only posterior to all the ideas, expressed in other parts, on which it depended. Yet Wolf, on little better basis than this, ventures thus (*Short Treatise*, p. cxxii) — "Freudenthal, however, has shown that they (the dialogues) must have been written *after* the main text of the *Treatise* because they assume a knowledge of various views al-

jecture, within the five year period of 1656-1661 and they give an expression to his thought prior to the inception of the *Correction of the Understanding* and the *Ethics*. For still another reason they are well suited to open a discussion of the unity of his thought: they illustrate nicely in brief scope how his ethical preoccupations must lead him to metaphysical problems and how the nature of the universe must be considered to elucidate man's nature, his conduct and his final high destiny. Conclusions of this sort are not too precise nor too sweeping to be based on writings as short and fragmentary as these: their themes are at the very center of the concerns about which Spinoza's philosophy is to form, and the *dramatis personæ* of the dialogues are the elements of his most considered problems.

The first dialogue expounds dramatically the problem to which Spinoza returns in the *Treatise on the Correction of the Understanding*. Understanding, Reason, Love, and Desire, since they are the parts involved in the problem, are made the persons of the dialogue. "I see, Brother," Love says to Understanding at the very opening, "that both my essence and perfection depend on your perfection."⁴ But the perfection of Understanding is the perfection of the object which it comprehends, so Love wishes to know if Understanding has yet conceived a being which is supremely perfect and incapable of limitations by any other. What Love seeks is an object supremely worthy of its desire and aspiration. Understanding answers Love's question, definitely and only once, and this is the single appearance which Understanding makes in the dialogue. The reason is clear: Understanding, which is the highest form of knowledge, is an intuition by the soul, of the truth joined to it immediately. Such a truth can only be indicated, scarcely expressed, so Understanding replies that it considers Nature only in its totality as infinite and supremely perfect. If there are doubts concerning this, Love may apply for further guidance to Reason. Reason is able to defend the ideal of Understanding presenting, itself, the

ready explained in other parts of the work. Thus all that may be asserted with confidence is that the notes, the Dialogues, and the Appendices are later than the rest of the *Treatise*." See also *Short Treatise*, p. 182.

⁴ *Short Treatise*, p. 32.

rational ideal, one of true knowledge and summed eventually in the one eternal unity, but this it can enforce not by an internal necessity of the soul, but rather by general knowledge arrived at discursively. Desire presents an opposed object for Love to attach itself to. Against the reassurances of Reason that Understanding conceives Nature in its entirety, infinite and perfect, Desire argues the absurdity of such contentions. Where is the unity Reason speaks of? Not unity but difference is what is observed in Nature. Even if you consider substances you have multiplicity, since there are thinking substances and extended substances, and if you posit a third higher than these in which they are united, you are involved in manifest contradictions: if you place it outside the first two and distinct from them, it will not have the attributes they have and consequently can scarcely be considered a whole outside of which there is nothing. It is to be omnipotent and perfect, so it must have produced itself; yet if it had produced others besides itself it would be more omnipotent. Similarly it is omniscient, so it will know itself; but the knowledge of oneself alone is less than the knowledge of oneself together with other substances. These are manifest contradictions and in view of them, Desire seems to suggest that Love turn from the impossible contemplation of supposed eternal unities to be satisfied with the variety and partial groupings of things which Desire presents.⁵

⁵ Wolf (*Short Treatise*, p. 185) quotes Freudenthal (*Spinozastudien* II) to support him in his insistence that Desire in this dialogue must be taken to mean *evil desire*, *concupiscentia* rather than *cupiditas*. Meijer, Appuhn, and Dunin-Borkowski all concur in this conjecture of Freudenthal. But it seems to be a needless subtlety, particularly since it blunts the fine point of the metaphysical drama. The rôle, Wolf finds, is a sinister one, and it differs, though he does not specify how, from Spinoza's conception of the function of desire. The distinction may be made, however, without recourse to melodrama: the Fourth Book of the *Ethics* is entitled *On Human Servitude or the Strength of the Emotions*, which is sinister if you will, but in the light of the contents of that book, the definition of desire (*Ethics* III, Def. I; II, 190) seems to fit the part of the drama. There is this modification which has occurred between the usage of the *Short Treatise* and the *Ethics*, that desire has been broadened in the latter to include, not only the endeavors of our nature which are enforced on us by external things, but also the endeavor that follows from our own nature according to the dictates of reason. The whole drama is then contained within Desire itself; desire can either oppose Reason or follow it. There are in fact two desires, that which arises from knowledge and that which arises from opinion, "*Omnes nostri conatus, seu Cupiditates, ex necessitate nostræ naturæ ita sequuntur, ut vel per ipsam solum, tanquam per proximam suam causam, possint intelligi, vel quatenus Naturæ sumus*

This speech and the questions it involves approach close to the problem to which the *Ethics* is a systematic solution. Nor is it surprising then that Love should consider the speech of Desire in a fashion justified by conclusions stated in the *Ethics*; Desire has presented purely metaphysical arguments, but to Love the ethical implications are apparent so immediately that the reply is heated ("What now, O dishonourable one, have you shown me but what would result in my immediate ruin."): Love declines to join itself to particular things since only hatred and remorse, or

pars, quæ per se absque aliis individuis non potest adequate concipi." (*Ethics* IV, Cap. I; II, 206). Desire in only the later sense plays the part in the dialogue; its rôle is to insist on a view of the universe based on changing individual things. Desire therefore can in the *Short Treatise* arise from either opinion or Reason, for both consider the outside world, opinion in an unordered fashion, reason only in true and rational presentation. The Understanding does not inspire Desire but Love directly. (For the relation of desire to hearsay and experience, see *Short Treatise*, Pt. II, ch. III, p. 173; its relation to reason and understanding seems to be implied in *Short Treatise* Pt. II, ch. XXI, p. 132. "And it is for this reason that we have said so often that one love may be extinguished by another which is greater, because in saying this we did not, by any means, intend to refer to desire which does not, like love, come from true knowledge, but comes from reasoning.") This distinction can be explained adequately by the objects toward which the different types of knowledge are faced: opinion and reason oriented toward external things; understanding turned inward and dealing directly with essences. That is indicated unmistakably in the later considerations and definitions of desire. "Desire, we have said, is the inclination which the soul has toward something which it chooses as good; whence it follows that before our desire inclines us toward something outside, we have already inwardly decided that such a thing is good, and this affirmation, or stated more generally, the power to affirm and to deny, is called the Will." (*Short Treatise*, Pt. II, ch. XVI, p. 105.) The Understanding is not concerned with things outside and beyond the soul, consequently the distinction between will and understanding is not necessary: there is in the perception of God an immediate recognition of his goodness, and therefore, no preliminary inclination or desire, but Love at once. The necessity of this love is intellectual and intuitive; all other loves, and desire too, follow a causal necessity. "Desire depends on the idea of its objects, and this understanding must have an external cause." (*Short Treatise*, Pt. II, ch. XVII, p. 112.)

These considerations would make Wolf's rather startling emendation (p. 32, l. 25) unnecessary. (The emendation is based on Freudenthal's conjecture, *Spinozastudien*, p. 271; it is not followed in Gebhardt's edition, *Opera* I, p. 28; for a criticism of it see his *Textgestaltung*, I, pp. 455-457.) Desire has said, "I see that thinking substance has nothing in common with extended substance, and that the one limits the other . . ."; Wolf supplies a "not" after "limits," pointing out (with acknowledgments to Freudenthal) that Spinoza says distinctly elsewhere that "body is not limited by thought, nor thought by body" (*Short Treatise*, p. 186). It is relevant to insist, however, that Desire is emphasizing contradictions in what Reason has just said. Considering the rationalism of Spinoza, it is reasonable to suppose that in this dialogue Desire, since it is confuting Reason, will contradict Spinoza's doctrines; particularly since the same sentence and paragraph go on to find inconsistencies in the notions of the unity, omnipotence, and omniscience of substance!

even oblivion, would result from such a union.⁶ For Love the problem is ethical, but it can not be separated from the problem of man's knowledge of the universe which Reason and Desire have stated in terms of unity and diversity; for Love works in the practical terms of man's conduct in that universe. Shall Love engage itself among the things of desire or seek the substance of reason? The answer must be made, characteristically, by considering whether Nature is multiple or simple. So in the *Ethics* the consideration proceeds from the nature of God to human knowledge to the emotions, through the First to the Third Books. The Fourth Book must solve the problem of how man shall conduct himself. That is a problem to be considered in terms of man's environment and his consequent emotions. Only then the Fifth Book can propound the question, not of the way of a good life, but of the perfect life, and for the elements of its solution it must return to the substantial unity expounded in Book I and to man's love consequent to it.

So here the question is at bottom that of the perfect life. The significant consideration is that Nature is one, since Desire is then condemned to error, and perfection is found in the knowledge of the true unity of things. Reason can easily remove the difficulty Love experiences. It does it by proving, over the objections of Desire, the unity of substance. Thinking substance and extended substance are substances only in relation to the modes which depend on them, for even Desire conceives thinking substance to exist by itself, that is to be a substance, and that only because of its modes, willing, feeling, understanding and loving, which are identical with it. But in just this manner infinite extension and infinite thought and other infinite attributes are but modes of the single, eternal, self-caused being beyond which nothing can be conceived. The trouble had come from the fact that Desire confused tran-

⁶ *Short Treatise*, p. 33; see also *Short Treatise*, Pt. II, ch. XIV, p. 100 " . . . the foundation of all good and evil is love bestowed on a certain object: for if we do not love that object which alone is worthy of being loved, namely God, as we have said before, but things which through their very character and nature are transient, then (since the object is liable to so many accidents, ay, even to annihilation) there necessarily results hatred, sorrow, etc. according to the changes in the object loved." Wolf insists that an acquaintance with this passage is assumed in the dialogue. The doctrine, however, is one fundamental to spinozism, and, as Spinoza remarks in the passage itself, he has said it before.

sient cause with immanent cause and had imagined that the whole exists only in its parts and that the cause is separate from its results. In the case of an immanent cause this is not true: an immanent cause produces all its effects within, and nothing at all outside, itself. This is the sense in which the understanding is the cause of its ideas. "And," Reason closes in this fashion, "that is why I called the understanding (in so far as, or because, its ideas depend on it) a *cause*; and on the other hand, since it consists of its ideas, a *whole*: so also *God is both an immanent cause with reference to his works or creatures, and also a whole considered from the second point of view.*"⁷

The second dialogue reinforces the first by making more precise just the distinctions of kinds of causes on which the essential unity of God is at last established. The personages of this dialogue are cast as pointedly as those of the first dialogue. Theophilus indicates by his name the love of God and by his discourse enforces the position stated by Understanding and defended by Reason in the previous dialogue. His rôle therefore adumbrates the association between the love of God and the Understanding. Erasmus (*Ἐρασμος-Desiderius*) is committed to neither good nor evil, and is willing to be led by Theophilus.⁸ The discussion is concerned with the distinction between a remote and an immanent cause, and the insistence of Theophilus is that God can be considered a remote cause only in one certain sense, with reference, that is, to the things which he has not brought forth directly by only existing. It is possible to speak of him with such a reference and to speak of creation by him, but what could be called creation, viewing God as a remote cause, is only a development of his nature which adds nothing to it, for God is really an immanent cause. The effects of an immanent

⁷ *Short Treatise*, pp. 34-35.

⁸ The part of Erasmus extends that of Desire in the last dialogue. Here desire is still limited to an empirical view of things. It is not, however, committed solely to the consideration of particular finite things, for in that it would be condemned, of course, to inadequate ideas; it is capable too of guidance by reason. Eventually, therefore, it would be submitted to the understanding and in the intellectual love of God desire would disappear. Wolf points out (*Short Treatise*, p. 137) the significance of the name of Theophilus, but it suggests to him only a comparison to Bruno; not a possible significance for the name of the other person of the dialogue.

cause remain united to it in such a way that together they constitute a whole. Nothing that God produces adds to his essence; "the essence of a thing does not increase through its union with another thing with which it constitutes a whole."⁹ This can be illustrated by the parts of any whole. Thus, if one were to construct the parts of the statue of a human being, say the head and the breast, it would in no wise increase the essence of either of those parts to put them together to form the upper part of the human body. This is true of ideas as well as of extended objects; one might have the idea of a triangle and at the same time an idea which grew from prolonging the side of one of the angles so that it was recognized that the exterior angle is equal to the two opposite interior angles. "These, I say, have produced a new idea, namely, that the three angles of the triangle are equal to two right angles. This idea is so connected with the first, that it can neither be, nor be conceived without the same. And of all ideas which any one has we make a whole, or (which is the same) a thing of reason, which we call the *Understanding*."¹⁰

This much must be clear in Spinoza's philosophy from the beginning: that the total array of physical things is such that taken together they constitute a whole so united to God as to be identified with Nature or with God. They are dependent directly on the attribute extension, but on the other hand they add nothing to that attribute, for, since it is an attribute of God, it is already perfect and capable of no increase or addition of perfection. So too with the understanding. The understanding of an individual being is a whole of ideas such that they give rise to new ideas without adding to the whole; and in the case of substantial thought, the sum of the ideas of the universe adds up to a whole which is Nature and which follows under the attribute of Thought, yet no idea could add to that attribute. There is still a third aspect of the same truth. Love working on the ideas of the understanding adds nothing to them. In the realm of ideas as in the realm of corporeal things, ideas or things can be united

⁹ *Short Treatise*, p. 37.

¹⁰ *Short Treatise*, p. 37.

in interrelated wholes which are in that sense productive, but without adding to the essence of any of the parts or to the essence of the ultimate and single unity. Yet this whole, though it is only an ordering and relating of things, a thing of the reason, is a significant manifestation of the cause to which it is united.¹¹

The importance of this doctrine is stated clearly. God has certain attributes; these depend on no anterior cause and require no genus for their definition, for they pertain to the essence of God. To investigate or develop the qualities implied in God's attributes would no more add to his nature than to set down all the truths involved in the geometry of the triangle would increase the nature of the triangle. As all the truths of the triangle are in the idea of the triangle, so all the world is in God without adding to the essence of God: the sum of created things could never add a new attribute to him and no single attribute can in any way be enlarged or swollen by the aggregation of its parts. So the conception of the whole is really a thing of the reason, and the precise artificiality of that status is important. It has neither essence nor existence save through the individuals of which it is composed. It is in fact precisely like the universal in this respect, with only one difference, that the *universal* is made up of individuals of the same genus and they are not united, while the *whole* is made up of individuals of the same and of different genera and they are united.¹² This is an observation which is implicit in Spinoza's later strictures against the universal. Those strictures are more than an attack upon a traditional doctrine; they are the defence of his system from a confusion he foresaw.

Erasmus, however, is concerned (since he is named as he is) with the ethical significance of this—how can a changeless God be the internal cause united to all things, when many things are nevertheless destroyed? Clearly, so

¹¹ This interpretation, which seems justified by Spinoza's treatment, would of course make "Pantheism" a loose and inexact description of this philosophy. There are, however, critics who use the term as synonymous with philosophy in Spinoza. See for example W. Meijer, *Benedicti Despinosæ philosophiæ brevis commentatio*, p. 11 . . . *pantheismus, sive philosophia prima aut absoluta de infinito æterno (agit)*. In fact, this is the common usage.

¹² See *Short Treatise*, p. 38.

long as their cause persists, the effects which are produced directly by God with no other intermediary than his attributes, can not perish; such effects are created immediately by God from all eternity. But God is not the inner cause of things whose existence does not depend on him directly; such things are limited, and though they can not be or act without God, they do not owe their existence directly to God but to other things; such things may perish. The problem is particularly pointed when it is brought to the question of the immortality of the human understanding, for the human understanding is a particular and limited thing, which, since it is individual, can not presume to the universality of an attribute of God and since it is created can not be eternal; and yet the understanding is of an essence so perfect that it must have been produced directly from an attribute of God and it must, like all other things which depend immediately on God, have been created from all eternity. It is the problem of why the human understanding alone of particular things should escape the mortality which is the consequence of birth and change and why the soul should be peculiarly elevated close to God.

The answer of Theophilus depends on a distinction: in order for a thing to be, some conditions are necessary to produce the thing itself, others are necessary that the thing be possible. To illustrate the distinction he remarks that a room might be lighted in two fashions: one might kindle a light and thus illuminate the room, or one might throw open a window, which in itself produces no light but permits light to penetrate into the room. In like fashion a particular mode (and therefore something else than an attribute of God) may be necessary for the existence of a thing, but God does not cease, for that, to be able to produce that thing immediately. And to bring this distinction precisely to bear on the problem, the difference of body and idea is in it; to produce motion in one body there is needed another body which possesses motion, but to produce the idea of God in us, no particular thing is needed which already has in itself that which it is to produce in us. All that is needed to bring us to the idea of God immediately is the existence of a body, our body, of which the idea is necessary. It is true in this sense that God is known to us by himself

and by no other thing. But we have no clear idea of God; if we had we should be united to him so closely that it would be impossible to love anything except him. Consequently we can not say that we are in reality united to God and that we depend on him immediately. But our soul is an idea in the attribute of Thought, dependent for its nature therefore on God, but for its origin and existence on the body to which it is joined. These are the problems and concerns of the *Ethics*, and if the first question of the first dialogue be recalled, this is at least the hint of the answer, for this is the fashion in which Love is to know that Understanding may conceive a supremely perfect object and that in turn Love may be perfect.¹³

II

THE metaphysical doctrines of which these dialogues are dramatic expressions, are developed more fully through the length of the *Short Treatise*. The occasion of the treatise has been supplied by conjecture. After Spinoza had left Amsterdam in 1660 he continued in correspondence with several residents of Amsterdam, notably Pieter Balling, Jarig Jelles, Dirck Kerckrinck, Lodewijk Meyer, Simon de Vries and Jan Rieuwertz. In 1663, moreover, he revisited them. It is likely that these men formed the nucleus of a little philosophic group of which Spinoza was a leader or teacher. Probably when he left Amsterdam to live at Rijnsburg he took with him the notes accumulated from his talks to them, and the *Short Treatise* may have resulted from these notes. If such were the circumstances he doubtless sent them parts of the manuscript as he completed it, just as he was later to send them the successive parts of the *Ethics*.¹⁴

¹³ The text of these two dialogues has been maligned frequently for its lack of clarity, and it is, no doubt, sufficiently cryptic to justify the protests of critics that it is mutilated and altered. (See, for example, Paul Janet, *Dieu, l'Homme et la Béatitude*, Paris, 1878, notes to pages 21, 22, 24, 25, 26, and 27.) There is no justification however for the attempts that have been made to fill in the supposed lacunæ; the conjectures of Janet are usually unspinozistic, sometimes fantastic. This is the more remarkable since all that the dialogues require for their explanation are the spinozistic settings which can be supplied from the *Short Treatise* or from the other works.

¹⁴ Cf. *Epistola XXVIII* to John Bouwmeester; IV, 163.

But not only is the story of the composition of the *Ethics* like that of the *Short Treatise*; the plan is essentially the same. This similarity is somewhat obscured by the mathematical form of the later work, but when Spinoza comes to review what he has proved in the First Book of the *Ethics*, his single intention becomes evident. "I have explained," he says in the Appendix to Book I¹⁵ "the nature of God and his properties: that he necessarily exists: that he is one: that he is and acts from the sole necessity of his nature: that he is the free cause of all things and in what manner he is: that all things are in God, and depend on him in such manner that without him they could neither be nor be conceived: and finally that all things were predetermined by God, not from the freedom of will or the absolute good-pleasure, but from the absolute nature and infinite power, of God." In the *Short Treatise* similarly he treats in successive chapters: that God exists: what God is: that God is the cause of all things: on God's necessary activity: on divine providence: on divine predestination. The direction which is travelled in both is clearly the same. The relevance of the examination of the nature of God is always to be sought in the manner in which that nature determines and governs the world, and among other things, notably, how it influences man's activity and thought. In spite of this patent fact, it is customary to seek some more personal and immediate inspiration for Spinoza's concern with the unity of God and of substance. Usually that is found by supposing it to be a criticism of Descartes's theory of substances.¹⁶ This is quite as one wishes. Doubtless in writing on substance, he was not unaware of Descartes's doctrine, since he was very familiar with parts of Descartes's works which treat of it; but his own writings were directed at something more philosophic than the dislodging of Descartes. When he is concerned with that, he does it specifically, as in his letters. Moreover, the literature on Spinoza should have

¹⁵ *Eth.*, I, Appendix; II, 77.

¹⁶ See for example A. Léon, *Les Éléments Cartésiens de la Doctrine Spinoziste sur les Rapports de la Pensée et de son Objet* (Paris, 1907), p. 87. "Que cette théorie hybride (of substance and attributes) tourne le dos à Descartes, cela nous paraît évident. Mais qu'elle puisse dériver d'une mauvaise intelligence du cartésianisme favorisée par certains passages mêmes de ce philosophe, c'est ce qui ne nous semble pas moins certain," etc.

made clear by this time that even this fundamental insistence on the unity of God's nature goes back for its source as much to the dualism massively expressed in the works of medieval jewish philosophers as it does to the somewhat different dualism current in the cartesian notions of the seventeenth century.¹⁷ For the medieval philosophers God, being pure form, is opposed to the material world and conceived to be essentially different from it. God is the one absolute being, and by creation or by some necessary sequence of emanations the world comes into being, dependent on the being of God. Thence there are discussions of infinite substance and finite substance, to which Spinoza's work, if it must be considered to have critical import, has an answer as pertinent as any disclosed by supposing it to be a criticism or a misconception of Descartes.¹⁸

Spinoza, to be sure, is motivated by other considerations than his medieval predecessors. Far from wishing to preserve for God an untouched spiritual nature removed by as many emanations or distinctions as possible from the imperfections of material substance, to the end that the distinction between God and matter might be clear, the chief purpose of his doctrine of God is to avoid the sharp demarcation between infinite substance and finite ones. He is, for that reason, to identify God with the whole of nature. That God is, is evident from the first, both *a priori* and *a posteriori*; although the proof *a priori* is to be preferred, God may be proved by external effects as well as through himself.¹⁹ The consideration of what God is falls in line, in a general way, with what is later to be said on the same subject in the *Ethics*; for reasons similar to those advanced there, God "is a being of whom all or infinite attributes are predicated, of which attributes every one is infinitely perfect of its kind."²⁰ However, before the attributes may be examined, ground must be cleared that they may remain clearly distinct from qualities commonly spoken of as his at-

¹⁷ Cf. H. A. Wolfson, "Spinoza on the Unity of Substance," *Chronicon Spinozanum*, II, pp. 92-117.

¹⁸ Cf. *Short Treatise*, Pt. I, ch. VII, p. 56. "The Thomists likewise understand God by it (*Natura Naturans*), but their *Natura Naturans* was a being (so they called it) beyond all substance."

¹⁹ *Short Treatise*, Pt. I, ch. I pp. 15-20 and ch. VII, p. 55.

²⁰ *Short Treatise*, Pt. I, ch. II, p. 21.

tributes. "As regards the attributes of which God consists, they are only infinite substances, each of which must of itself be infinitely perfect. That this must necessarily be so, we are convinced by clear and distinct reasons. It is true, however, that up to the present only two of these infinities are known to us through their own essence; and these are thought and extension. All else that is commonly ascribed to God is not any attribute of his, but only certain modes which may be attributed to him either in consideration of all, that is, *all* his attributes, or in consideration of *one* attribute. In consideration of *all* [it is said], for instance, that he is eternal, self-subsisting, infinite, cause of all things, immutable. In consideration of *one* [it is said], for instance, that he is omniscient, wise, &c., which pertains to thought, and, again, that he is omnipresent, fills all, &c., which pertains to extension."²¹ There are, that is, as well as attributes correctly understood, the other traditional attributes which are called *Propria*; without them God would be no God, but still it is not they that constitute God; for they reveal nothing of the character of a substance. When they pertain to all the attributes they are peculiar to God alone, but from such properties as they indicate we can not know either what God is or what his attributes are. When they refer to only one of his attributes, as omniscient, merciful, wise, which are only modes of thinking, they do not pertain to God, but are only modes of the thinking attribute.²²

Three of these *propria*, nevertheless, deserve particular consideration since by them qualities which must be attributed to God may be known. First, God as the cause of all things leads to the conception of God's necessary activity, so that a true conception of his freedom can be formed, for "*true freedom is only, or no other than* [the status of being] *the first cause*, which is in no way constrained or coerced by anything else, and which through its perfection alone is the cause of all perfection."²³ The second *proprium* of God is "his Providence, which to us is nothing else than the *striving* which we find in the whole of Nature and in individual things to maintain and preserve

²¹ *Short Treatise*, Pt. I, ch. VII, p. 52, note †.

²² *Short Treatise*, Pt. I, ch. VII, p. 53.

²³ *Short Treatise*, Pt. I, ch. IV, p. 44.

their own existence.”²⁴ Third, divine predestination necessitates the recognition that God cannot omit to do what he does, that everything has been made by him so perfect that it can not be more perfect, and that without him nothing can be or be conceived.²⁵ The *propria* thus, while they deal with the qualities of God, are oriented toward the particular things which flow in infinite variety from God. Because certain of these are more valuable and precise in the inferences they warrant, Spinoza found it useful to comment on only three of the large number of ideas which people commonly have of God: a being existing through or of himself, cause of all things, omniscient, almighty, eternal, simple, infinite, the highest good, of infinite compassion, and others of this sort. This consideration and choice in the conventional lists of God’s attributes represents an interesting phase of Spinoza’s development and discloses one of the points at which he worked from conceptions that were current to his own definite position. The doctrine of attributes is considered here only after the theological discussion has been rummaged for conceptions that must reveal some scrap of true observation and that permit also metaphysical elaboration; in the *Ethics* the doctrine of infinite attributes is stated starkly for theologians to confound if they wish. The progress, however, is in careful steps; in the *Metaphysical Reflections* the traditional enumeration still has its place; only in the *Ethics* is it subordinated entirely to the infinite attributes which the intellect perceives as constituting the essence of substance.²⁶

The attributes, unlike the *propria*, concern themselves with the metaphysical constitution of things, for “the attributes (or, as others call them, substances) are things, or, to express ourselves better and more aptly, [constitute] a being which subsists through itself, and therefore makes itself known and reveals itself through itself. As to the other things, we see that they are but modes of the attributes, without which they can neither be, nor be understood.”²⁷

²⁴ *Short Treatise*, Pt. I, ch. V, p. 47.

²⁵ *Short Treatise*, Pt. I, ch. VI, p. 48.

²⁶ Similar developments from traditional terms and themes are to be observed in other problems. See for example note 1 p. 69 below on *Natura Naturans* and *Natura Naturata*.

²⁷ *Short Treatise*, Pt. I, ch. VII, p. 55.

There is here a conception of the universe which supposes an essential ordering of things. One of the fundamental convictions of spinozism is here in the First Part of the *Short Treatise*: there is never a hesitation or a doubt concerning the reality and the intelligibility of a suprasensible order in Nature; that order, in fact, is what constitutes Nature, not as it is evolved in things, but rather as it is the source and mover of all evolution. That it is intelligible follows from its nature; the manner in which it may be known is dependent on the nature of man. Consequently the Second Part of the *Short Treatise* is to work with one other fundamental conviction of Spinoza: that as we are ourselves essence, our thought is capable of assimilating essences, causes and finally being; it is this really to know the substance that underlies the world as we experience it. Nature, therefore, is considered first in terms of God, *Natura Naturans*, a being we conceive clearly and distinctly through itself without invoking anything beside itself. God and his attributes are known without intermediary. The attributes are identical with God, but they bring with them modes or creations which depend on God immediately; these are the general *Natura Naturata*.²⁸ They are motion in matter and understanding in the thinking attribute. Each is eternal, immutable, and infinite in its kind, but neither can be understood without its proper attribute, motion without Extension, nor understanding without Thought. By the activity of these products, immediate cre-

²⁸ The distinction and doctrine of *Natura Naturans* and *Natura Naturata* are bits of customary medieval philosophy. This accounts for the number and variety of analogous doctrines which commentators have found to clarify Spinoza. Wolf (*Short Treatise*, pp. 199–200) refers to Aristotle, Augustine, Scotus Eriugena and Averroës. Freudenthal (*Spinoza und die Scholastik*, p. 104, note 1) invokes somewhat more precisely Thomas Aquinas (*Sum. Theo.*, I, 2 qu. 85, art. 6), Peter of Bergamo, and Bartholomæus of Usingen (*Natur. Philos. epit.* p. 9, ed. 1543). To these Couchoud (*Benoît de Spinoza*, p. 46, note 1) adds the following by way of illustrative corroboration: Meister Eckhart (537, 29), St. Bonaventura (*Lib. Sent.*, III, 8, 2), Averroës (*de Cælo*, I, 1), Vincent of Beauvais (*Speculum quad.* XV, 4), Peter of Abano (*Council. Differentiarum*, 9, 14, 3), Fr. Sanson (*Quæst. in Aristot.*, 1496.–II, 5). This list might be lengthened even further, but no end would be served, save the enforcing of the already obvious fact that in this doctrine Spinoza took over a distinction that had wide currency in the middle ages. It is however interesting to observe that the distinction is retained implicitly in his later works, though the terms tend to fall out of his usage. They occur again nevertheless in the *Cog. Meta.* (II, 7; I, p. 264 and II, 9; I, p. 267) and in the letters (*Epistola IX* to de Vries; IV, p. 45) and in *Eth.* I, 29 sch. and 31; II, 71.

ations, or Sons of God, the whole universe of individual things, particularly *Natura Naturata*, flows in an infinite and necessary sequence. The world of changing finite things which operate about us is in only this last step, but the entire superstructure is its necessary background and explanation in the spinozistic system.

Once God has been established and his attributes have been considered to this end, ethical problems may be entered upon intelligently. And should there still be doubt concerning the ethical intention of all this metaphysics, the last chapter of the First Part of the *Short Treatise*, treating of God and what pertains to him, turns to the question of what good and evil are. For clearly in this view good and evil are nothing, only things of the reason, and each object as it is in essence, arranged in the order imposed by God, is perfect of its kind; good and evil are only relations which depend not so much on something essential in Nature as upon the decisions of our understandings. It is we who form general ideas of types of things, and a thing is good or bad as it conforms to or falls short of the idea of its type. Good and evil in themselves, however, are neither things nor actions.

III

BOOK TWO enters upon the properly ethical problems; it is entitled *On Man and What Pertains to Him*. What man is and what is proper to him follow, of course, from the nature of God and his attributes, so that the fundamentals of physics and psychology as well as of ethics are laid by the discussion of Book One. How intimately they are bound together and how necessary it is that the consideration of ethics be reserved till a foundation be made of a knowledge of the nature of God, the world, and the human soul, can be felt only if one reflects that these problems of knowledge, of physics, and even of theology are not to be treated here as the central theme, but are introduced only incidentally as they are urgently required. One might say that it is less God and the world that interest Spinoza, than God operating in man and the effects

of the world on his thinking and behavior.²⁹ Yet his indications and solutions are ubiquitous in the *Short Treatise*. Indeed even in Chapter XIX of the Second Part, when after careful preparation through the length of the *Treatise*, Spinoza approaches the subject of the liberation from the passions and the foundations of our happiness (the chapter is entitled *On Our Happiness*), he must reiterate his preoccupations.

"And first [we have] to show that in Nature there is a body through whose form and activities we are affected, and thus become aware of it. And the reason why we do this is, because when we get an insight into the activities of the body and the effects which they produce, then we shall also discover the first and foremost cause of all those passions; and, at the same time, also that through which all those passions might be annihilated. From this we shall then also be able to see whether it is possible to do such a thing by the aid of Reason. And then we shall also proceed to speak about our Love of God.

"Now to prove that there is a body in Nature, can be no difficult task for us, now¹ that we already know *that* God is, and *what* God is; whom we have defined as a being of infinite attributes, each of which is infinite and perfect. And since extension is an attribute which we have shown to be infinite in its kind, it must therefore also necessarily be an

²⁹ Cf. for example, *Short Treatise*, Pt. I ch. IX, p. 57 "all this, I say, since it [Motion] more properly belongs to a treatise on Natural Science than here, we shall not consider in this place, but we shall only say this about it, that it is a *Son, Product, or Effect* created immediately by God." *Epistolæ*, LIX, LX and LXXXIII indicate the extent of his interest in the general problems of physics, and seem to indicate too that he intended to write on them. His treatment of the processes of knowing and feeling, both here and in the *Ethics*, is obviously truncated to ethical requirements. This is evident in itself without the contrast which the *Correction of the Understanding* affords with even its incomplete consideration of one of them. Some of the more curious and persistent misinterpretations of Spinoza's philosophy are due precisely to the fact that there occurred nowhere in his program a need to consider in their own right such problems as the relation of body and mind, the nature of truth, and the contrasted operations, instead of the relative status, of reason and knowledge. He offered solutions to all of these. But although his answers are expressed accurately and tersely, they are sufficiently out of the line of tendencies of later philosophy to tempt critics to rather violent interpretation. It is possible, for example, to reconstruct what he might have said of body and mind had he spoken as a psychologist or an epistemologist. But he seldom spoke in either of these rôles: for him the distinction of body and mind represented the diverse manners of activity of a multiplicity of things, existing in two realms, thought and extension, and preserving in each an identical order and interrelation.

attribute of that infinite being. And as we have also already demonstrated that this infinite being exists, it follows at once that this attribute also exists.

"Moreover, since we have also proved that outside Nature, which is infinite, there is, and can be, no being, it is clearly manifest that this effect of body through which we become aware [of it] can proceed from nothing else than from extension itself, and by no means from something else which (as some will have it) has extension in an eminent degree [*eminenter*]: for (as we have already shown in the first chapter) there is no such thing."³⁰

To reach even the irreducible item of ethical inquiry, a being possessed of a body and a mind, it is requisite that we depart from the source of being. For Nature is an infinite being, beyond which there is nothing. Extension is an infinite attribute of Nature, and all the effects such as Motion and Rest, which depend necessarily on extension, must be attributed only to it; there is nothing beyond it which influences it, nor any effect in it of which it is not the explanation. Moreover, if we consider extension alone there is nothing else in it for us to become aware of, except Motion and Rest. All modifications of bodies result through them and neither they nor bodies can be affected except by them alone. What is true of extension is true also of the attribute of thought. Thought too is an infinite attribute of Nature, and understanding depends on it in such fashion that ideas are accessible to and affected directly by understanding alone. In particular, for each body there is an idea and that idea is united to it in such a way that together they form a whole. From these truths, that is, that there is a perfect being, that there can not be more than one, and that since he is infinite he will have infinite attributes, each infinite in its kind, it follows not only that things will exist in nature, variable in terms of motion and rest, but further, for each thing there must be an idea in the thinking attribute, resulting from its essence and existence in conjunction. "Between the Idea and the object there must necessarily be a union, because the one can not exist without the other: for there is no thing whose idea is not in the thinking thing, and no Idea can exist

³⁰ *Short Treatise*, Pt. II, ch. XIX, p. 119.

unless the thing also exist. Furthermore the object can not change without the Idea changing also, and *vice versa*, so that there is here no need for a third thing that should bring about the union of soul and body. It is to be remarked, however, that we are speaking here of such Ideas which necessarily arise from the existence of the things together with their essence in God; but not of the Ideas which the things now actually present to us, [or] produce in us. For there is a great difference between these: for the Ideas in God do not arise as they do in us by way of one or more of the senses, which are therefore almost always imperfectly affected by them; but from their existence and their essence, just as they are.”³¹

The soul therefore derives its origin from the body and its changes depend upon changes in the body; this is what is meant by the union of soul and body. But the soul is a mode of the attribute Thought, and consequently this origin of the soul and these changes of the soul are not to be explained by a dependence of the soul on the body or of the body on the soul, but only through the fact that the nature of things is seen to be such that no thing could exist as a body if it did not express in that existence an ideal essence. What that essence is and how it is to be conceived and defined, depend not on the material circumstances of the object, but on the ideal conditions that circumscribe it. “And since, as a matter of fact, Nature or God is one being of which infinite attributes are predicated, and which contains in itself all the essences of created things, it necessarily follows that of all this there is produced in Thought an infinite Idea, which comprehends *objective* the whole of Nature just as it is *realiter*.”³² The real existence of an Idea in Nature requires nothing more than the thinking attribute and the object. The relative importance and function of each is easily apparent. “These modes, now under consideration, [even when] none of them exists, are nevertheless equally comprehended in their attributes; and as there is no inequality whatever in the attributes, nor yet in the essences of the modes, there can be no particularity in the idea when there is none in Nature. But as soon as

³¹ *Short Treatise*, Pt. II, ch. XX, p. 128-129, note ††, no. 10.

³² *Short Treatise*, Appendix II, pp. 157-158.

ever some of these modes take on their particular existence, and thereby become in some way different from their attributes (because then their particular existence, which they have in the attribute is the "subject" of their essence), then there shows itself a particularity in the essence of the modes, and consequently in the "objective" essences of these which are necessarily comprehended in the Idea. And this is the reason why we said, in the definition, that the Idea *arises from an object which really exists in Nature.*"³³ The essence of the Idea is purely ideal, its occasion and delimitations are furnished by some specific and existent thing. Or to state it in still another way, the essence of a thing without its existence is implied in the nature and designations of things, so that the idea of such an essence removed from existence can not be regarded as something separate. For the face of things is then like a white wall in which there is obviously no this and that. But when there is both essence and existence, there is then an object and by the same token there is then an Idea.³⁴

What has been said holds equally for the relation of the soul to all attributes. Particularizing now to Extension, which besides Thought is the only attribute we can know, we are in a position once more to examine the metaphysical implications of the relation of our body and our soul. For in Extension there is nothing but Motion and Rest, and therefore differences among bodies are to be explained solely in terms of relative proportions of motion and rest. There is in the thinking attribute an Ideal essence of this actual proportion; this is the soul. Such is the meaning the definition of the soul has taken on: "the essence of the soul consists in this alone, namely, in the existence of an Idea or "objective" essence in the thinking attribute, arising from the essence of an object which in fact exists in Nature."³⁵ At some stages, our body is to have proportions of motion and rest, radically different from those it

³³ *Short Treatise*, Appendix II, p. 160.

³⁴ *Short Treatise*, Pt. II, Ch. XX, note †† p. 128, no. 7.

³⁵ *Short Treatise*, Appendix II, p. 159; see also p. 161 and Pt. II, Preface, note †† nos. 7-9; particularly the last: "From such proportion of motion and rest comes also to existence of *our body*; of which, consequently, no less than of all other things, there must be a Knowledge, an Idea, etc., in the thinking thing, and hence at once also *our soul*."

now has: prior to birth, as an unborn embryo, and again after death; but at no time will there cease to be an Idea or Knowledge connected with it, though that soul has been and will be different from the soul we now know. In fact death or any complete or violent change is nothing other than the alteration of the proportion which has for a time been the basis of our soul. But alterations may be less thorough and violent than those of death or madness. Bodies acting upon us will affect our body, and they can affect it only in terms of motion and rest. But these changes cannot take place without the soul, which always changes correspondingly to the body, becoming aware of the change. This is the basis of our awareness of the external world; the change itself is what we call feeling.

Our essential and accidental relations to Nature and to things are such that we are necessarily aware of ourselves and the things outside ourselves. And the nature of that awareness is defined by just those relations. What knowledge we have takes its origin in this sense from our knowledge of ourself: the basis of experience and reasoning is an *idea reflexiva*, or the soul's awareness of itself. Alter the proportion of motion and rest in the body and the soul which expresses the essence of that ratio is changed accordingly. The soul will be aware of the change, feel it, say, in increased cold or heat. Knowing that change it will know something of itself and of the body that has affected its body. Therein it will have the beginnings of reason.³⁶ There is, however, another knowledge possible than the one which has this origin. For there is the essence of the soul which is the knowledge of the body. What it knows from the fact that it participates in an infinite attribute and is joined to it is better founded than what it knows from the modifications of the *ratio* which determines its particular essence.

The relations of the soul to the body may be indicated most precisely in the three distinct ways in which we find ourselves in contact with the objects of our knowledge. There are three ways in which ideas arise in us. In the first place we have belief (or Opinion) from the fact that we are particular beings possessed of bodies which are

³⁶ Cf. *Short Treatise*, Appendix II, pp. 161-162.

affected and modified by others. Our opinions arise from our own experience or from hearsay, and they are all guess and surmise, and therefore subject to error. But in the second place we have general notions, arrived at by careful logical methods, which formulate the rule of our experiences and so describe no one thing but apply to many. This is true belief (sometimes Spinoza speaks of it simply as belief) and it is the high ideal, built by reason, of our sciences. But as opinion told us only how a thing affects us and not what it is, so true belief informs us concerning what the thing must be rather than what it is. Reason works really in probabilities although, when its method is stringent, its probability becomes categorical for the mind. The third type, which is knowledge, works, not on opinion or belief, but only on clear and distinct conceptions. Its origin and possibility are not in the fact that we are individuals in a world of individuals, but rather in the fact that we are essence, and have therefore a place in the substance which is the sum of all essences and the source of all intelligibility. All clear conceptions arise from what we are, rather than from what is done to us, and therefore fundamentally, the difference between belief and knowledge, between reason and understanding, is that belief argues from notions and ideas in the mind to things outside the mind, while knowledge asserts only that which the mind has been made by nature to be. Belief is a proceeding from abstract ideas to things, and so, necessarily incomplete although it is certain, while knowledge is a well-authenticated proceeding from essence to essence. "Belief is a strong proof based on Reasons, whereby I am convinced in my mind that the thing is really, and just such, outside my understanding, as I am convinced in my mind that it is. I say, *a strong proof based on Reasons*, in order thereby to distinguish it from Opinion, which is always doubtful and liable to error, and from Knowledge which does not consist in being convinced by Reasons, but in an immediate union with the thing itself. I say, *that the thing is really and just such outside my understanding* — really, because reasons cannot deceive me in this, for otherwise they would not be different from opinion. *Just such*, for it can only tell me what the thing ought to be, and not what it really is,

otherwise it would not be different from Knowing. *Outside*, for it makes us enjoy intellectually not what is in us, but what is outside us.”³⁷

The often repeated example of the Rule of Three serves to illustrate this distinction. Tell a man that in a proportion the fourth number is to be obtained by multiplying the second by the third and dividing by the first; if he should follow the rule without investigation, his knowledge of it would be entirely by *hearsay*; should he examine it in some actual calculations he might give credence to it on the basis of his limited *experience*. But he might be dissatisfied with the inadequacy of both of these; he might examine the nature of the proportion in the light of true reason. Properly applied, reason can never be deceived, but the things we apprehend with only our reason are not seen by us, but only known to us through the conviction of our mind that it must be so and not otherwise; this would be *belief*. Clear *knowledge* depends on none of these inadequate data but by penetration sees immediately the proportion in all such calculations.

It requires no demonstration to realize that opinion, whether by hearsay or experience, is commonly subject to error; by it one can be sure of nothing. But reason, whereas it does not apprehend the thing as it is, can nevertheless be indubitable in the information it gives concerning the thing. It does not seize the richest or fullest reality. Nevertheless that which is determined by a rigorous use of reason will be true. There are, in Spinoza's terms, four effects of Reason or Belief. In the first place, as has been remarked, it shows us what a thing ought to be, but not what it really is. Second, it brings us to a clearer understanding, through which we love God, and in this it makes us intellectually aware of things which are not in us, but outside us. Third, it gives us the knowledge of good and evil and shows us all the passions which should be suppressed. Finally it opens to us the distinctions of true and false.³⁸ Each of these “effects” is only an aspect of what we have already learned that reason is, and if we consider reason in its proper place, that is, the thinking agent in its

³⁷ *Short Treatise*, Pt. II, ch. IV, note †, p. 74.

³⁸ *Short Treatise*, Pt. II, ch. IV, pp. 74-75, and ch. XV, p. 102.

environment of intelligible Nature and of the world of things, they follow easily one from the other. The fact that they include moral as well as cognitive functions serves only to emphasize the fundamental nature of ethical problems.

Yet in none of these functions or "effects" is Reason either sufficient or man's highest faculty. We have already considered the *first*, that reason reveals what a thing ought to be, not what it is. In discursive reason, the mind is always concerned with reproducing in itself a true conception of something beyond it. In knowledge, on the other hand, the mind is intimately connected with the truth it asserts, for the truth is in it, not beyond it. This, of course, is bound up with and elucidated by the notion of truth and falsity, by, that is, the *fourth* effect.

A true idea differs from a false idea, not as idea, for they are both equally idea, but in the degree in which it represents the nature of the thing as it really is. "Truth is an affirmation (or denial) about a certain thing, which agrees with that same thing; and Falsity is an affirmation (or denial) about a thing, which does not agree with the thing itself."³⁹ To appreciate this, man's place in nature must be recalled again. For him to have ideas which he may judge as true or false, means this: that his soul has been changed in such a way that it receives modes of thought which it did not have before. In all the possible ways of receiving such modes of thought the soul is purely passive: clearly, opinion arises in the soul because its body has been affected, and what the soul knows of the nature of the thing that affects its body depends entirely on the modification its body suffers; in reason the modes of thought which the soul receives are also enforced by the thing—there is only this difference, that reason results from the action of the whole object and not of only an incomplete part. In both, the awareness of the mind is limited to what something has effected in us. Truth and falsity are consequently conceptions which do not permit of a sharp distinction; it is not sufficient nor accurate to say only that this is true and that is false. Rather ideas have more and less reality as they agree more and less with the nature of

³⁹ *Short Treatise*, Pt. II, ch. XV, p. 102.

the thing. Reason can of course attain to a truth, and can, moreover, so solidify its truth that it will be proof against any contrary movements of insufficient opinions, since such movements must be slighter. But its truth is always something which it has through certain general and common notions of things outside itself. Consequently, though in knowledge too the soul is in a certain sense passive, still in knowledge essences and ultimately the most perfect being act on the soul. The Truth is God himself, and God is known best as he operates directly on man, that is, as he is evidenced to man in so far as man is essence, not as he is mode. Knowledge therefore has once more this undoubted superiority over Reason. "From this, then, we see the perfection of one who takes his stand upon Truth, as contrasted with one who does not take his stand upon it. Since the one changes easily, while the other does not change easily, it follows therefrom that the one has more stability and essence than the other has: likewise, since the modes of thought which agree with the thing have more causes [to produce them] they have more stability and essence in them; and, since they entirely agree with the thing, it is impossible that they should after a time be made different or undergo some change, all the less so because we have already seen before that the essence of a thing is unchangeable."⁴⁰ Perfect truth is possible only by knowledge, and in knowledge the whole essence of the thing operates on the soul and is joined essentially to it.

The distinction between reason and understanding in this respect is nothing other than the natural consequence of the *second* effect of belief. The consummation of the activity of reason would be a complete knowledge of things outside us so that ultimately we should be led to an understanding and love of God who is the whole of Nature. But it would not be the highest understanding nor the most full love, for it would be arrived at in consequence of something else and not immediately. The highest fulfillment is reserved for the understanding by which we know God intimately and in consequence only of his presence immediately to us.

Connected with these effects of belief, in fact only an-

⁴⁰ *Short Treatise*, Pt. II, ch. XV, p. 104.

other aspect of them, there remains one more effect, the *third*, which is the peculiarly ethical effect. Belief gives us knowledge of good and evil and so gives us a criterion for judging the passions. The judgment of good and evil is as much the function of reason as the judgment of true and false. In fact, as in the judgment of truth, the distinction of good and evil is purely a rational one. In Nature there is no good and no evil; good and evil have reference only to what the mind conceives as the natural perfection of the thing . . . "when we have conceived in our mind an Idea of a perfect man, it should make us look (when we examine ourselves) to see whether we have any means of attaining to such perfection. Hence, then, whatever advances us toward perfection, we call good, and, on the contrary, what hinders, or also what does not advance us toward it, bad." ⁴¹ It is inevitable then that reason be more than only a static cognition; the passions and activities of the soul are to arise in reference to the ideas that are presented by reason and opinion. The soul will choose something as good and be inclined toward it; this is desire. It will enjoy something and endeavor to be united to it; this is love. It will be inclined to ward off from it such things as have caused it some harm; this is hatred.

IV

WITH this orientation the problem becomes at last an ethical problem. Yet it is still the same problem, and if it had been considered without these preliminaries its nature would have been ignored completely. We have been able to prove the existence of a body from the consideration only of the consequences of God and his attribute of extension. We have, in the second place, been able to demonstrate, departing again from God and his attributes, that there must be an idea united to each object that exists, and therefore the existence of a thing can be taken as undoubted warrant of the being of an ideal intelligible essence of that thing. As from our first consideration we had a basis for examining motion and rest, now we have the basic plans

⁴¹ *Short Treatise*, Pt. II, ch. IV, p. 75.

for a doctrine of knowledge. The problems of ethics are a third step. Inevitably, if there are ideas in the thinking thing, it will be inclined to or from that which is known. The judgment of good and bad is inherent in knowledge. We are considering the same problem as we were, but love is the center now, instead of knowledge or motion. The same necessity reigns, and the causal nexus is identical: motion and rest are explained only in terms of adequate causes; knowledge is the acting upon us of the essence or of some part of a thing. Love too is a necessary consequence of our nature, for just as knowledge is the thing acting upon us, so our will, and in consequence love and the passions, are only the thing affirming and denying in us things about itself. "For we have said that the understanding is purely passive; it is an awareness, in the soul, of the essence and existence of things; so that it is never we who affirm or deny something of a thing, but it is the thing itself that affirms or denies, in us, something of itself" ⁴² ". . . it [love] does not depend on us, but only on the good and useful which we discern in the object; it is necessary that these should never have become known to us, if we would not or should not love it; and this is not a matter of our free choice, or dependent on us, for if we knew nothing, it is certain that we should also be nothing." ⁴³ This independence of love from our conscious control does not make it fortuitous, but rather relates it to our essential character and derives it from the very essence of us. "We must, however, note here as an excellent thing about the passions, that we see and find that all passions which are good are of such kind and nature that we can not be or exist without them, and that they belong, as it were, to our essence; such is the case with Love, Desire, and all that pertains to love." ⁴⁴

From this point of view the ethical import of what has gone before becomes evident. There are three types of knowledge; each has its characteristic consequences in the activities of the soul. From opinion proceed all the passions which are opposed to good reason; from belief, the

⁴² *Short Treatise*, Pt. II, ch. XVI, pp. 108-109.

⁴³ *Short Treatise*, Pt. II, ch. V, p. 79.

⁴⁴ *Short Treatise*, Pt. II, ch. XIV, pp. 99-100,

good desires; from knowledge, true and sincere Love with all its offshoots.⁴⁵ The evil of the passions is only the inadequacy of opinion, not indeed so far as it is considered as a way of knowing, but as it is the cause of an inclination of the soul, since it moves the soul according to judgments based on insufficient grounds. “. . . the foundation of all good and evil is *Love bestowed on a certain object*.”⁴⁶ Virtue is no different from knowledge; it consists in guiding love to an object truly worthy of being loved, and that is nothing but a proper guiding of the intellect. “We have already pointed out before how the movement, passions, and activities of the soul arise from ideas, and these ideas we have divided into four kinds, namely [according as they are based on] mere hearsay, experience, belief, clear knowledge. And from what we have now seen of the effects of all these, it is evident that the fourth, namely clear knowledge, is the most perfect of all. For opinion often leads us into error. True belief is good only because it is the way to true knowledge, and awakens us to things which are truly lovable. So that the final end that we seek, and the highest that we know, is true knowledge. But even this true knowledge varies with the objects that come before it: the better the object is with which it happens to unite itself, so much the better also is this knowledge. And, for this reason, he is the most perfect man who is united to God (who is the most perfect being of all), and so enjoys him.”⁴⁷

This is a doctrine which Spinoza thought susceptible of popular interpretation. By means of it some of the important doctrines of Natural Theology may be clarified. “All passions which come in conflict with good Reason (as is shown above) arise from Opinion. All that is good or bad in them, is shown to us by True Belief; these however — both or either of the two — are not able to free us from them. It is only the third kind, namely True Knowledge, that emancipates from them. And without this it is impossible that we should ever be set free from them, as will be shown subsequently. Might not this well

⁴⁵ *Short Treatise*, Pt. II, ch. II, p. 69.

⁴⁶ *Short Treatise*, Pt. II, ch. XIV, p. 100.

⁴⁷ *Short Treatise*, Pt. II, ch. IV, p. 76.

be that about which, though under different designations, others say and write so much? For who does not see how conveniently we can interpret opinion as sin; belief, as the law which makes sin known; and true knowledge, as grace which redeems us from sin?"⁴⁸ These, he would seem to say, are the genuine observations and grains of truth which form the beginnings of the theological doctrines.

For final ethical guidance and salvation one returns necessarily to Knowledge. But the preliminary service of reason is clear too. Reason, by its balancing of good and evil, has a double control over the passions: it can liberate us from passions by showing us something harmful and unworthy in them or by revealing to us something more worthy of our love. That service in itself is useful but scarcely sufficient. "It is only True Belief or Reason that leads us to the knowledge of good and evil. And so when we come to prove that Knowledge is the first and principal cause of all these passions, it will be clearly manifest that if we use our understanding and Reason aright, it should be impossible for us ever to fall a prey to one of these passions which we ought to reject. I say our *Understanding*, because I do not think that Reason alone is competent to free us from all these."⁴⁹ The limitations of reason appear clearest in the reflection which seems to have recurred to Spinoza, that we may know a thing to be good or bad and not find in ourselves the power either to do the good or abstain from the bad. In the *Short Treatise*, he solves this difficulty by a distinction. Reason can cause the extinguishing of opinions we get from hearsay, but not those we get from experience. For in the love of a thing we are attached directly to the object and the power of the love is derived from the power of the object; when we receive that power directly it is greater than when we receive it indirectly as we do in reason. In the case of Opinion the passion is inspired by a concrete real object which operates upon the soul; Reason opposes to it only its formalized general notions. The understanding however brings the soul into contact with a concrete reality again, and one infinitely more perfect than those indicated in opinion.

⁴⁸ *Short Treatise*, Pt. II, ch. XIX, note †, p. 118.

⁴⁹ *Short Treatise*, Pt. II, ch. XIV, p. 99.

Recourse must be had, then, to the clear knowledge which is attained through the understanding and by which God is known, not as the consequence of something else, but immediately. "We come now to the second kind of objects, which though eternal and imperishable, are not such through their own power. However, if we institute a brief inquiry here, we become immediately aware that these are only mere modes which depend immediately on God. And since the nature of these is such, they can not be conceived by us unless we, at the same time, have a conception of God. In this, since he is perfect, our Love must necessarily rest. And to express it in a word, if we use our understanding aright, it will be impossible for us not to love God."⁵⁰ Reason can show imperfections in loves or it may lead to knowledge; earthly loves are impregnable by Reason directly, but fall before the Love of God.

The ethical problem and its solution can be summarized then in terms of the essence and existence of man. He is body and idea, united in such fashion that the idea is aware of changes that take place in the body. As the body is changed and improved, the idea becomes more perfect. It becomes conscious moreover of the effects of corporeal things acting on its body. So it acquires knowledge of and a feeling toward corporeal things. It might turn from these to Reason: a knowledge, that is, of things outside it, though not of individual corporeal things; but it could by no means rest in that knowledge without passing on to the knowledge without which the body and idea could neither be nor be understood. Knowing that, it must be united to it immediately through love.⁵¹ This is the progress of the man who follows his highest destiny; this is his beatitude and his freedom; for human freedom is "a firm reality which our understanding acquires through direct union with God, so that it can bring forth ideas in itself, and effects outside itself, in complete harmony with its nature; without, however, its effects being subjected to any external causes, so as to be capable of being changed or transformed by them."⁵² What things are in our power and what things

⁵⁰ *Short Treatise*, Pt. II, ch. V, p. 80.

⁵¹ Cf. *Short Treatise*, Pt. II, ch. XXII, pp. 134-135.

⁵² *Short Treatise*, Pt. II, ch. XXVI, pp. 148-149.

we must suffer from the operation of external causes require for their understanding only the detailed realization of what the soul is — an Idea in the thinking attribute arising from the reality of a thing which exists in Nature. There will be duration and change in the soul as there is in the thing; it may finally become united with the body of which it is the idea or with God without whom it can neither be nor be conceived. The latter is its immortality.⁵³

These were the novelties Spinoza spoke of and communicated to his friends; in his letters he closed them with careful admonitions. He warned his friends that they should not be astonished, for a thing does not cease to be true because it is not accepted by many. But they must observe care in communicating these things to others. They should ponder over such difficulties as might arise rather than hasten to refute the doctrines. These admonitions moreover suggest to readers who come centuries later, a further admonition, for there are in this treatise the elements by which Spinoza's doctrine may be interpreted in its own terms rather than as forced to conform to other terms, and in it is probably the most nearly adequate introduction and commentary that the philosophy of the *Ethics* is likely to receive.

⁵³ Cf. *Short Treatise*, Pt. II, ch. XXIII, pp. 136-137.

Chapter III

SPINOZA AND DESCARTES

I

DURING his stay at Rijnsburg, Spinoza undertook the task of instructing a young student in philosophy. Simon de Vries writes from Amsterdam¹ mentioning him by name, Casuarius (sic), and envies him the privilege of living under the same roof and conversing with Spinoza concerning the best of things at all times, at dinner, at supper and while they walk. Spinoza protests in reply² that de Vries need have no envy of Casearius: no one was more odious to him and he had to exercise constant care in what he said. For Casearius seemed to be fonder of novelty than of truth, and though Spinoza had some hope for his future, he urged those of his friends who knew his opinions to conceal them from this pupil till he should reach a more mature age.

Yet it was concerning philosophy that they were to converse, and since Spinoza's caution required that he conceal his own philosophy, the instruction would have to turn to the principles of other men's philosophies or to an unsystematized examination of concepts. From this beginning grew the *Principles of Descartes's Philosophy* and the *Metaphysical Reflections*. Other influences helped mold the plans, and the book that resulted bears the mark of divergent philosophic intentions. Spinoza writes to Oldenburg concerning the events that led to its publication.³ He had moved again that April to Voorburg; that was the reason for the delay of his letter, and then, he goes on, having completed the task of moving, he went to Amsterdam to visit his friends. They asked him to make a

¹ *Epistola* VIII (olim 26); IV, 29; February 24, 1663.

² *Epistola* IX (olim 27); IV, 42.

³ *Epistola* XIII (olim 9); IV, 63; July 17/27, 1663.

copy for them of a "certain treatise containing, in brief scope, the Second Part of the *Principles* of Descartes, demonstrated in the geometric manner, and also the chief points that are dealt with in metaphysics." This, he remarks, was the treatise which he had previously dictated to a certain youth to whom he did not wish to teach his own opinions openly. Next his friends requested that he prepare, as soon as he could, the First Part according to the same method. He agreed to do this as a service to them and so set at once to work, completing the task in two weeks. When he turned it over to his friends, they asked his permission to print it, which permission he granted readily on the condition that some one, under his supervision, cast it into a more elegant style and add a short preface advising the readers that the book did not contain the opinions of the author but that he held the precise contrary to not a few of the things written there. One or two examples of the difference of views were to be appended. He expressed finally the sanguine hope that the appearance of this work might awaken the interest of some people in high position in his country and might lead them to want to see other things which he had written and which he acknowledged for his own. Possibly, they might see that he be enabled to publish them without danger to the law of the land. But even after Ludwig Meyer had undertaken and had written the preface which Spinoza requested in such specific terms, Spinoza was not satisfied with the result.⁴ In the first place he wanted it specified definitely that Part I had been composed within two weeks and consequently the expression might be expected to be obscure and inexact in some parts. In the second place he wanted it made clear that he did not change the cartesian proofs in order to correct Descartes but in order to suit his order of demonstration better and to avoid increasing the number of axioms. Finally he asks that an attack on a certain fellow (*homunculus*) be omitted from the end of the preface in order that the book might appear in the interests only of spreading the truth and of the pursuit of philosophy.

These circumstances are sufficient commentary and in

⁴ *Epistola* XV to Meyer; IV, 72-73.

view of them the demonstrations of the *Principles of Descartes's Philosophy* and the considerations of the *Metaphysical Reflections* may be read, as well as for their literal sense, for a significance that may clarify the relation of Spinoza's philosophy to that of Descartes. In his demonstration, the philosophy of Descartes is seen under a rigorous and critical scrutiny that reveals some important problems and difficulties rather more clearly than did the original statement.⁵ Moreover since the demonstrations are brief, since the proofs are occasionally modified and since they involve selection and rearrangement of the philosophic material, there are the inevitable traces of Spinoza in the work. These traces may be sufficient to justify conclusions concerning the philosophy of Spinoza, though his concern here is with demonstrating the philosophy of another man.

Of the conditions of the composition of this book, the most clearly relevant, of course, is the selection which Spinoza had made of the parts of Descartes's philosophy suitable for the instruction of his incautious pupil. Ludwig Meyer repeats the indications and cautions specifically: Spinoza had been teaching his pupil all the Second Part of the *Principles* and part of the Third, as well as the more important and more difficult questions of metaphysics which had not been touched on by Descartes. Meyer says that in the interest of clarity and completeness Spinoza had yielded to the entreaties of his friends that he demonstrate the First Part also. It is important, then, to notice, that the First Part deals with the metaphysical principles of Descartes's philosophy, the Second Part with the mechanical principles. The implications of Spinoza's choice are strengthened by the fact that we have a clear statement of his personal estimation of those mechanical principles. Writing to Oldenburg two years after the publication of the *Principles of Descartes's Philosophy*, Spinoza subscribes to all of Descartes's rules of motion except the sixth; he speaks of Huygens's insistence that they were all false, but points out that he did not follow Huygens in that opinion; in fact, in the case of the sixth rule he was con-

⁵ Cf. the very illuminating article of Professor Gilson, "Spinoza, Interprète de Descartes," *Chronicon Spinozanum*, t. III, pp. 68-87.

vinced that Huygens as well as Descartes had erred.⁶ Spinoza approved, then, of the science of Descartes; of the scientific attitude of Descartes and of the interpretation he had put on his own principles, he has other things to say. In a letter written in the same year, he criticizes Descartes's precipitation in deserting his principles when the discovery of the rings of Saturn seemed to him to affect profoundly his mechanics.⁷ Ultimately Spinoza was to abandon the cartesian principles too, but that was to be later, and for other and metaphysical reasons. In 1663, however, he could subscribe to the rules of motion, and his selection of them to the exclusion of Descartes's metaphysics is significant indication of the curriculum of studies he set for Casarius. He had demonstrated the section of Descartes's system concerned with the universal principles of natural things,⁸ and he had started in Part Three to investigate phenomena which follow in the world according to those principles.⁹ The rest of the course of studies is contained in the *Metaphysical Reflections*, which is cartesian in substance and tone, but there is no statement of system nor indoctrination in that work, only an investigation of metaphysical concepts and categories, first as applied to being and its affects, then as applied to God, his attributes, created substances and their accidents.

Although Spinoza was prepared therefore to conceal his own philosophic convictions and although he taught another man's philosophy, there seems, even on this superficial view, ground for the belief that he set out to demonstrate of his own initiative nothing contrary to his opinions. To conceal one's philosophy, it is scarcely necessary to teach a philosophy distinctly false, and Spinoza's scrupulous care for the truth, which is evidenced in the preface and disavowals he required to the printed book, would have guided him in forming the course for Casarius. Considerations of the immaturity of Casarius, moreover, seem to have convinced Spinoza that the analysis of current conceptions in philosophy would be better training

⁶ *Epistola XXXII* (olim 15); IV, 174; November 20, 1665.

⁷ *Epistola XXVI* (olim 13); IV, 159.

⁸ *Principia rerum naturalium universalissima*, *Princ. Phil. Pars III*; I, 226.

⁹ *Ibid.* Cf. Meyer's Preface, *tertiam Partem de Mundo aspectabili*; I, 131.

than even an investigation that set out only to find the truth. The *Metaphysical Reflections* covers indeed exactly the ground that a philosophy manual of this period would attempt; even the order of questions is the same.¹⁰ So, as a pedagogical device, he analyzed metaphysical concepts, without leading to a total system, and he taught physical principles which he followed substantially. In the one case, in metaphysics, he was convinced that the understanding, if used correctly, would lead necessarily to the Truth: what he offered was a dialectical training calculated to guide the mind to correct ways of thinking. In the other, in physics, he taught what he thought to be accurate principles, and in the application of them, if the concern were only with physical phenomena, he was convinced that it would be difficult to wander far from the truth.¹¹

These, then, are the philosophical strata that may be looked for in the *Principles of Descartes's Philosophy*. There is in the First Part the demonstration of the more important questions of metaphysics, such as Descartes discussed. These are derived not from the *Principles* of Descartes, but from his *Meditations*. Moreover, Spinoza specifies that in his demonstration he has chosen only the parts which are properly metaphysical; parts which deal with logical questions or have only an historic interest are omitted.¹² This section, written last and added only when his friends insisted that in the interests of completeness the metaphysics of Descartes be set before the physics which follows from it, is most pointedly disavowed by Spinoza. Yet though the views were never his, this statement of them is recognizably spinozistic in the selection and rearrang-

¹⁰ Cf. Freudenthal, *Spinoza und die Scholastik* 94 ff.

¹¹ This peculiarity of Spinoza's almost exclusive reliance on the judgment of reason, with its consequent shift of emphasis in empirical investigation, should be borne in mind in any discussion of his scientific ideas. Evidences of it are plentiful in the *Principia*. "Sic enim nobis ad delineamenta naturæ explicanda, hypothesis aliquam ad libitum assumere licet, modo ex ipsa omnia naturæ Phenomena per Mathematicas consequentias deducamus. Et, quod magis notatu dignum est, vix aliquid assumere poterimus, ex quo non idem effectus, quamquam fortasse operosius, per naturæ Leges supra explicatas, deduci possint." *Prin. Phil.*, Pars III; I, 227-228. Granted, that is, the truth of the laws of motion, any hypothesis whatsoever would have some grounds of truth, and no hypothesis could lead ultimately to a conclusion different from that deduced by any other hypothesis.

¹² *Prin. Phil.*, *Præf.*; I, 130.

ing of problems and sometimes in the criticism and modification of proofs. Second, the mechanical principles of Descartes are expounded in Parts II and III. Finally, there are the discussions of metaphysical concepts in the *Metaphysical Reflections*. The questions which might be considered profitably become clear from this division. In the First Part, as well as in his letters and elsewhere, Spinoza's attitude toward the cartesian system is marked sharply and unmistakably. The *Metaphysical Reflections* lends corroboration to this by contributing discussions of cartesian and scholastic terms which may be subjected to examination. And then from Parts II and III of the *Principles*, inklings of a sense of the cartesian physics may be found which make apparent the place it might occupy in Spinoza's philosophy.¹³

The First Part of the *Principles*, then, treats of the same subject as Book I of the *Ethics* and in the same mathematical form, but for all that, there is not the least resemblance between them. In both, God, his qualities, and his relation to the universe are demonstrated by the geometrical method, but the one begins with the mathematical proof of the priority of the substance which is God and from which the world is to be derived, the other with a discussion, set down in prose lest the argument be impeded by the prolixity of the mathematical method, of universal doubt and of the one principle of certainty—to understand clearly and distinctly. In the *Ethics* all things are

¹³ Couchoud has pointed out (*Benoît de Spinoza*, p. 67) that Spinoza lived in a cartesian center, that at no time was cartesianism in such vigor in the environs of the University of Leyden as in the period 1660–1676. Not only the professors and readers of philosophy of that period were Cartesians, Frans van Schooten, Jean de Raei, Heereboord, Geulincx, but also those of medicine and law and even the three theologians, Heidanus, Coccejus and Hoornbeck. Since Casearius had been a student of theology at Leyden in 1661, excuse for teaching Descartes would have been the easier. But in the case of Spinoza there seems reason to seek a more philosophic justification.

Apart from the familiarity with the cartesian philosophy which Spinoza shows in his works, the extent of his acquaintance with it may be estimated somewhat by the copies of Descartes's works which he left in his library: *Descartes Brieven*, *Descartes Proeven*, his *de Prima Philosophia*, his *de Geometria*, his *Opera Philosophica* (in the 5 volume quarto edition of 1650) and his *de Homine*. (*Inventaire*, pp. 140, 141, 149, 150, 152, 153; Freudenthal, nos. 31, 34, 44, 45, 46, 49, 50, 51). In addition he had Clauberger's defense of Descartes (*Klauberghs uytbreiding van Descartes*) and Clauberger's *Logic* (*Inventaire*, pp. 185, 188; Freudenthal, nos. 121, 127) and he was acquainted at least with the *Exercitationes Mathematicæ* and *Principia Matheseos Universalis* of a-Schooten (*Inventaire*, pp. 154 and 159; Freudenthal, nos. 53 and 64).

seen to depend upon and are deduced from a God who can not be ignored; in the *Principles*, since there Spinoza has effaced himself entirely behind Descartes, God, and eventually the world, is inferred from an existence that can not be doubted. Spinoza is said to have remarked this specifically: according to Tschirnhaus, he pointed out that most philosophers begin with creatures, that Descartes began with the mind, that he began with God.¹⁴ This is more than a curious reflection concerning accidental predilections; it is a statement of the metaphysical divergence which in its ultimate implications marks a total philosophic sundering. There were, Spinoza is saying, in the first place, the mass of scholastic philosophies current at the time, in which the model of certainty and the beginnings of science and philosophy are taken in the objects of experience. For them the necessary and unquestionable basis of all knowledge was the data of sensation; the human mind was adapted to know primarily and best the physical world in which it has its life and experience. Descartes had turned from that opinion, though in turning he had to go no further from scholasticism than to the traditional augustinism; for him the soul knows itself better than anything else. The soul's knowledge of itself is made the model, in clarity and certainty, for all other knowledge; and other knowledge furthermore must either be derived from that first knowledge by some mathematical procedure or at least be modeled on it in form and certainty. But Spinoza is not concerned with either preoccupation. He does not ask what the mind knows first or best, and consequently does not, like the scholastics, find the traces of order or of God in the world the mind knows, nor, like Descartes, does he labor to find the warrant of the certainty of both God and the world in the implications of the mind's self-knowledge. In fact, he was later to point out that the mind's knowledge of both the world and itself was inadequate; consequently neither could serve as a pattern or as a beginning for truth. For him the model of certainty is that which is most highly rational; and the mind will know necessarily, if it is properly directed, that which is

¹⁴ Ludwig Stein, *Leibniz und Spinoza*, p. 283. Cf. Brunschvicg, *Spinoza et ses Contemporains*, p. 297.

wholly and exclusively intelligible. Not the world nor the soul but God, since he is the source of understanding, is the model of truth.

Spinoza had already stated unmistakably that there is nothing which could make God's existence clearer to us than it is of itself at all times. God is known through himself, and we have only to exist to know him, for the knowledge of God is involved in our being. The mind's very essence implies a knowledge of God, for the human mind is God's own intellect in the peculiar circumstances and limitations imposed by knowing our body. If, therefore, we guard ourselves from external influences which will lead us to error, and if our knowledge is determined only by an inner and essential necessity, we must know God adequately and accurately. Descartes, on the contrary, takes the fact of his own existence as the type of indubitable certainty. He must proceed therefore according to the illumination his consciousness throws on things, and not according to a unity or a pervasive logic in them. Save thinking, all things may be doubted. The demonstration of Descartes's philosophy by the geometric method must begin, not with the knowledge that God or substance exists, but with the certainty which is self-evident, that I am.¹⁵

Beginning then with this model and germinal certainty, the steps of demonstration must lead from knowledge of self to certain knowledge, first of God, then of the external world. Three distinct essences must be vouched for; the knower, God, and bodies; each must have a distinctive intellectual warrant, dependent not on the certainty of their being but on their places in the scale of perfection; knowledge of all three moreover must proceed from the primary knowledge, that of self. There are difficulties in the way of this, and Spinoza seems to have been even more clearly aware of them than Descartes, or at least to have discovered by the exigencies of the geometric method, the need of greater precautions against the precise dangers. He states the full implications of the proposition, *cogito, ergo sum*.¹⁶ The person whose existence is guaranteed by the cartesian formula is not the person of a particular body, living at

¹⁵ *Prin. Phil.*, Pars I, 2; I, 152.

¹⁶ *Prin. Phil.*, Pars I, *Prologomenon*; I, 143 ff.

some time or in some place. His existence is evident, as Descartes had pointed out, only as "a substance of which all the essence or nature is only to think and which has need of no place nor of any material thing in order to be."¹⁷ It would be easy to suppose (*feindre*), while thinking, that one had no body. Spinoza consequently repeats the formula in that sense, "For he could doubt concerning his body, but not concerning his essence, since he thought. Moreover, he did not perceive his body clearly and distinctly, and consequently according to his method mentioned above, he had to reject it as false."¹⁸ Seen in this light Descartes's philosophy, if it is to be demonstrated, begins in establishing the certainty of our own existence. But to state that certainty so that it may be used in demonstration involves a slight shift of emphasis. The primary truth in Spinoza's formulation is *I am*; all other things are uncertain so long as this is not recognized; and it is a truth that must be known through itself. This is an equivalent to Descartes's caution that as primary truth it is to refer, not to a thing constant in body but to a thinking thing.¹⁹ Such a conception is far from the doctrine which Spinoza had already expressed in the *Short Treatise*, since for him the mind is not entirely distinct from the body, but its essence is to have knowledge of the body. Spinoza could not doubt that he existed nor that he thought nor that he knew God, for all three are involved in the immediate fact that man exists possessed of such a mind and such a body 'as he might have. In this temporal existence, mind can not be conceived separated from body. If the datum of consciousness is examined, it makes clear immediately the unity of being and thought. To be is to think and to think is to be.

From that point the divergence between the doctrine of Descartes and Spinoza is sharp, and Spinoza's fine perception of the nature of that divergence is constantly in evidence in his presentation of Descartes's philosophy. For Spinoza consciousness made indubitably evident the single substance of which substantial thought and exten-

¹⁷ Descartes, *Discours de la Méthode, Quatrième Partie*; vol. VI, p. 33.

¹⁸ *Prin. Phil. Pars I, Prolegomenon*; I, 144.

¹⁹ *Prin. Phil., Pars I, 2, 3 and 4*; I, 152.

sion are aspects and by which body undergoes modifications in the same order and sequence as mind. For Descartes, however, the proposition *sum cogitans* or *ego sum* is itself the fundamental truth of all philosophy; all other truths must be modeled on it in clarity and distinctness and only those things can be admitted as of equal certainty "which one observes in one's self in so far as one is thinking."²⁰ To proceed to the search for truth requires an examination of man's thinking, its circumstances, and implicit causes. It is not a question, as in Spinoza's philosophy, of exploring a substantial unity and relation in things, but rather an appeal to the principle of causality and the nature of causal sequences. Spinoza was clearly aware of the basis of this demonstration; not only are there the warnings of the prolegomenon, but the order by which he chooses to proceed shifts entirely to a causal emphasis: having demonstrated in the first four propositions of Book I that thinking involves existence and that it is the mind rather than the body which is the primary fact of this cognition, he interrupts the progress of his propositions with a scholium and eight new axioms taken from Descartes, all concerned with the nature of causality.

The total effect of this introduction is to exhume, as it were, from the substrata of this philosophy, two major considerations: first, that every thing that exists must have a cause; and second, that the cause must have as much or more perfection than the result, and, applied particularly to knowledge, the perfection of ideas must be considered to be a result either of a particular thing or of a substance; they must, that is, have a cause which contains them either formally or eminently.²¹ From the first of these principles our knowledge of the universe can acquire a basis as cer-

²⁰ *Prin. Phil.*, Pars I, 4, sch.; I, 153.

²¹ This is a notion which is perfectly clear in its medieval statement, though modern philosophy would obscure it. There can be no misunderstanding Spinoza's statement of it. "*Verum cum gradus realitatis, quos in ideis advertimus, non sint in ideis, quatenus tanquam modi cogitandi considerantur, sed quatenus una substantiam, alia modum tantum substantiæ repræsentat, seu uno verbo, quatenus ut imagines rerum considerantur: hinc clare sequitur idearum nullam aliam primam causam posse dari, præter illam, quam omnes lumine naturali clare, & distincte intelligere, modo ostendebamus, nempe in qua eadem ipsa realitas, quam habent objective, formaliter, vel eminenter continentur.*" *Prin. Phil.*, Pars I, Ax. IX; I, 156.

tain as the first truth, *ego sum*. "If any should wish to doubt, whether or not something can arise out of nothing, he might at the same time doubt whether or not we are while we think. For if I am able to affirm something of nothing, namely that it can be the cause of some thing, I shall be able also, by the same right, to affirm thought of nothing and to say that I am nothing while I think."²² But not only is the universe such that everything that exists must have a cause, but things in the universe must have an amount of perfection and reality such that the entire universe will be ranged in varying degrees, step by step, of reality and perfection. Substance has more reality than an accident or a mode, infinite substance more than finite; and in like fashion there is more objective reality in the idea of a substance than in the idea of an accident and more in the idea of infinite substance than in the idea of finite substance.²³ Ideas are involved as necessarily as things in both principles, that of sufficient causes and that of the hierarchy of perfections. The reality of an idea is not simply as thought; to be an idea is to be essentially. Consequently if a man has ideas concerning his own body and in his own thought, it is because he contains actually that which his ideas reflect. It is possible that the idea he has exceeds his own perfection or that he have it even against his will; in that case the cause must be sought beyond the man: either a formal cause (that is, one whose perfection is equal to the perfection of the effect and consequently one which the resulting idea may represent adequately) or an eminent cause (that is, one whose perfection exceeds the perfection of the effect, and consequently the resulting idea will mark only the consequence of it).²⁴ It is by this principle that Spinoza is able to declare²⁵ that the existence of God is demonstrated in the *Principles of Descartes's Philosophy* from axiom 9: the objective reality of an idea requires a cause in which the very same reality is contained not only objectively but formally or eminently.

²² *Prin. Phil. Pars I*, 5, sch.; I, 154.

²³ Cf. *Prin. Phil. Ax. IV*; I, 154.

²⁴ Cf. *Prin. Phil. Pars I*, Ax. IX; I, 156.

²⁵ *Epistola XL* to J. Jellis; IV, 199.

II

AFTER the considerations of the nature of causation which Spinoza forces forward at the very beginning, there is a solid basis for the investigation of our knowledge of God and of phenomena. Since our knowledge of the two arises from causes which are different, the one an eminent cause, the other a formal cause, the bases of certainty too are different. Moreover since this difference is entirely the distinction in the perfection of the two, the idea of the more perfect will itself be the more perfect idea.²⁶ The procedure of the proof consequently is to take up first the nature of our knowledge of the most perfect being, then to return to the grounds of certainty once more, since the inquiry into our knowledge of God must shed some light on the nature of our knowledge, and finally to examine our knowledge of the world of particular things. But all three are bound together, and to be deduced properly they must be drawn singly from the one fact which is present always and undoubted when we think, namely, that I am. From thought alone the bases and all the interrelations of philosophy are to be drawn.

Primarily, then, we can advance from the certainty that we think and doubt by the principle that the cause must contain as much perfection as the result. An additional principle is evident from it, that no lesser cause is required for the conservation of an object than for its first creation. In the light of the two the fact that we think and doubt requires not only that we be, but also that a perfect being must be. "Since the nature of every cause must involve and contain in itself the perfection of its effect, it follows clearly that something is given necessarily either in us or without us which we have not yet understood, whose concept or nature involves existence and which is the cause by which our thought began to exist and continues to exist. For although our thought began to exist, its nature and essence for all that involve necessary existence no more than before it existed. Wherefore it needs the same force in order to persevere in existence as it needed in order to

²⁶ Cf. *Prin. Phil. Pars I, Ax. IV; I, 154.*

begin to exist. And this which we have said of thought, must be said of every thing whose essence does not involve necessary existence."²⁷ There is involved here no question of the representation of ideas or of the adequacy of their representation, but only the fact that ideas are and that their being indicates a gradated universe. Spinoza gives examples: take a statue and some copies that have been made of it; if the material alone be considered there is no need to see separate causes for each of them. But if the statue be considered as an image, something must be found which contains formally or eminently that which the image contains representatively. Or two books written in the same hand may be derived from the same cause, or even derived one from the other. Yet the first might have been the composition of a great philosopher and the second of an insignificant man, an inequality which must be detected if the sense of the words be attended to. It is a question then, not of the truth of what ideas indicate, but rather of the perfection contained in ideas, since that perfection must be perfection of essence and reality. Any idea indicates a step in the rank of perfections; it could not exist in isolation. If intelligence appears in transient beings, it is because there is an intelligence and an intelligibility, and a merely transient intelligence would be insufficient to explain the continued presence of intelligent beings.

This is the starting point of the demonstration of God's existence. There are three actual proofs: one from the consideration only of this nature of God and two *a posteriori* proofs, one beginning with an idea, the other with the existence, already demonstrated, of the knower. The first proof, as Descartes states it, is a modified version of the ontological argument of Augustine and Anselm. It is impossible to conceive a supremely perfect being who yet does not exist, for lacking existence he would not be absolutely perfect. Spinoza restates it: "God's existence is shown from the consideration simply of his nature,"²⁸ and he appends to it the discussion in which he has shown

²⁷ *Prin. Phil. Pars I, Ax. X; I, 157-158.*

²⁸ *Prin. Phil. Pars I, 5; I, 158.* It is a significant commentary on the reorientation necessitated by Spinoza's mathematical analysis that the *a priori* proof should be first in his demonstration and third in Descartes's. Cf. *Ve méditations*, vol. IX, p. 52.

the existence of God to require no further testimony than is implicit in our thought. The nature of God involves necessary existence; if any of our thoughts or doubts be considered, enough can be learned of the nature of God to assure us of that. Therefore all that is needed to demonstrate the proposition is, and Spinoza actually notes only, the definition: to say that something is contained in the nature or in the concept of a thing is the same as to say that it is true of the thing.²⁹ Consequently though the movement of the proof is identical in Descartes and Spinoza, the points of emphasis are entirely different. Spinoza has no concern with the specific idea in us of a perfect being whose perfection implies that he must exist, but he puts it in the form of an insistence rather that existence belongs to the nature of God. In neither form does the ontological proof touch on the possibility of conceiving a most perfect being or indicate any relation of that being to the representation of a human idea. Rather it rests on the fact that the human mind, dealing with ideas and essences, touches in all its movements on what must be consequences of the most perfect essence. Spinoza seems to have had this clearly in mind in the very shrewd alterations of his statement of Descartes's demonstration. He saw that the strength of this proof, as of the two that are to follow, was not in the precision of any knowledge we have of God or of his perfection, for our knowledge is in itself so very fallible, but in the fact that our thinking, right or wrong, as indeed all finite being, involves a being whose existence is therefore necessary and who is the eminent cause of the perfection of things and ideas. But the proof of God should not be from the consideration of any of these consequences. He, as cause, contains them; the idea of him is warrant for his existence, not because all ideas depend on him, but because his nature involves existence.³⁰ It

²⁹ *Prin. Phil. Pars I*, 5, dem. and def. 9; I, 158 and 150-151.

³⁰ It is to be remarked that this rehandling of the ontological proof is designed to bring out strongly its *a priori* characteristics; this is natural since Spinoza was convinced that the proof *a priori* was superior to that *a posteriori*. (Cf. *Short Treatise*, Pt. I, ch. I, p. 20.) It is interesting, by way of contrast, that Duns Scotus worked over the same proof with the conviction that a proof *a priori* was impossible; consequently he "colored" the ontological proof to show it to be essentially *a posteriori*. (Cf. *Op. Oxoniense*, dist. 2, q. 2, n. 8 ff., and *IV Sent.* 1, I. dist. III, q. 2 also q. 3.)

unintelligible: "1. Whatever can accomplish that which Spinoza recognizes to be the philosophic spring of Descartes's doctrine. "From this proposition many extremely important consequences follow. Indeed on the fact alone that existence pertains to the essence of God or that the concept of God involves necessary existence, (just as the concept of a triangle involves that its three angles be equal to two right angles) or that his existence not otherwise than his essence is an eternal truth, on that fact depends almost all our knowledge of the attributes of God, by which we are led to a love of him or to the highest beatitude." ⁸¹

The second proof begins with the idea we have of God. "God's existence is demonstrated *a posteriori* from this alone, that there is in us an idea of him." ⁸² For we do have an idea of God, and the objective reality of that idea can be explained by nothing in us or in any other thing except God himself. A perfect idea is a perfect reality and it is impossible without the existence of a perfect thing. Here again though it is now a question of the objective perfection of our idea, that perfection does not involve the accurateness or the adequacy of the representation of God in our idea. It is not the comparison of an idea to a thing, nor is there a passage from an idea formed in the mind to the existence of a being represented. If such processes were required in these proofs, the objections that have been raised to them in the history of thought, from their prototypes as formulated by St. Augustine to their contemporary expression, would have been well-taken. If the mind is a power of thinking in a world wholly separated from it and unlike it, then thinking has only a logical efficacy; the idea which the mind forms of God would establish only that, if there were such a being, he would exist necessarily; it would hardly prove that there must be such a being. But such is not the case: the passage is not from thought to things, but from essence to essence, from the human mind which possesses a certain essential perfection in an idea to the one essence by which the human mind and its perfect idea are possible. The momentary exist-

⁸¹ *Prin. Phil. Pars I*, 5, sch.; I, 158-159.

⁸² *Prin. Phil. Pars I*, 6; I, 159.

ence of the human mind is guarantee of the necessary existence of that perfect essence. In other words, our idea of God is not a reflection of an object and need not, consequently, be tested by comparison with it; but to have an idea of God is the direct working of God upon the mind; no further verification is needed than only to have the idea. In that sense the existence of God is proved by the idea we have of him. If any inquietude arise concerning those who say they have no idea of God, and that inquietude concerning the fool who says in his heart there is no God did trouble in each instance Augustine, Descartes, and Spinoza,³³ it can be argued, as they argued variously, that a person with no idea of God was no man but truly a fool and an animal.

Considerations of just this sort lead to the confusions in the third proof. "God's existence is demonstrated from the fact that we who have the idea of him exist."³⁴ Spinoza insists that this can not be proved by the reasons Descartes gives. He finds the two axioms of Descartes's proof unintelligible: "1. Whatever can accomplish that which is greater or more difficult can accomplish that which is less. 2. It is greater to create or to conserve substance than attributes or properties of substance."³⁵ For, Spinoza remarks, a spider spins easily a web which men could weave only with the greatest difficulty and men on the other hand do many things most easily which are impossible to angels. So what does *more difficult* mean? It could not mean that which is impossible nor that which is more perfect. Spinoza is pointing out fundamentally that Descartes has made a confusion in the hierarchy of perfections—even if a higher form include the perfections of the forms beneath it, it does not necessarily perform all the functions of the lower forms; in fact the contrary supposition is more probable. Moreover, as regards the second axiom, it can not be decided definitely what Descartes means by the comparative difficulty involved in conserving substance and attributes: if attribute be defined as that which is formally contained in substance, or the

³³ Cf. *Prin. Phil. Pars I*, 6, sch.; I, 160.

³⁴ *Prin. Phil. Pars I*, 7; I, 160.

³⁵ *Prin. Phil. Pars I*, 7, dem.; I, 160-161.

power and properties of some other substance, or finally the qualities which are eminently contained in substance, in none of these senses can it be demonstrated to be more difficult to create substance than attributes. Clearly what Descartes meant to deduce from his axioms is that I have no power to conserve myself, since if I had such power I should give myself all the marks of perfection of the Absolute Being: consequently my continued existence can be made an indication of the existence of a perfect being. But equally clearly he failed in that intention, and therefore Spinoza substitutes adroitly another proof, based on the axiomatic truth that I can not conserve my own existence and therefore I must be conserved by some other being which has also the strength to conserve itself. But whoever possesses that power must exist necessarily and must be God. The force of this proof is in that it proceeds from the fact of an existence and proves God's existence by an inference that requires only a conception of relative powers of existence. Consequently it is distinct from the preceding proof though both are *a posteriori*; for the second proof started from the idea in some one's mind and by a consideration only of ideas and of a hierarchy of perfections in them, worked to the supreme reality implicated in all ideas. Yet there is the same underlying notion in these two proofs. The existence of individual things, whether it be the idea in one's mind of a perfect being or whether it be the individual knower himself, can not be regarded in either case as a single disjointed phenomenon. The existence of an idea implies an objective hierarchy: the existence of a finite being implies the infinite being by which it is possible for it to be and to continue to be. So long as I think and so long as I have some idea of God, there can be no question of his existence. Existence can be explained only by being referred to a necessary existence. Spinoza expresses it succinctly, "No finite and imperfect being (that is, partaking of nothing) can be conceived, unless we first consider a perfect and infinite being, that is, God: wherefore God alone must be said to be absolutely infinite, since we find that he is manifested with truly infinite perfection."⁸⁶

⁸⁶ *Cog. Meta. Pars II, c. 3; I, 253.*

III

THE existence of God is in this fashion to be deduced from the certainty of our own existence, and takes on from it a like certainty. It is as indubitable, on the evidence of my thinking, that God is as that I am. There remains one further step to be taken: the deduction of things from thought. Some causal efficacy must be found if our ideas of things are to be not mere gestures toward the things they indicate, but reliable descriptions of them. The adequacy of our perceptions must be sought not only in a causality exercised by things perceived, but it must be connected, as a necessary corollary, to the demonstration of God's existence. Not only is it a fact that we see things as we do, but there is involved with this the further fact that God is able to bring about just as we perceive it, all that we perceive clearly. "There is in us the idea of some power so great that by him alone in whom it is, the sky and the earth could be made, and all other things which are understood by me to be possible: therefore, at the same time as the existence of God all these things are proved of him."³⁷ The idea of God involves necessary existence, and it guarantees too a possible existence for all things which we perceive clearly and distinctly.

Here once more there is a tighter logical concatenation in Spinoza's statement than in Descartes's original proof.³⁸ The certainty of our knowledge is to depend upon the veracity of the God who has been demonstrated, but Spinoza recognized that certainty had to reflect in the cartesian system the efficacy of the causal sequence. Consequently, having considered the nature of God, he proves first that all things that exist are conserved by the power alone of God and that God is the cause of the essence of things, then that God is supremely veracious and not a deceiver and that therefore whatsoever is clearly and distinctly perceived is true.³⁹ And lest the importance of the

³⁷ *Prin. Phil. Pars I*, 7 cor. dem.; I, 166-167.

³⁸ Yet the ideas are wholly cartesian. Cf. *Réponse aux premières objections. Œuvres de Descartes* (ed. Adam et Tannery) vol. IX, p. 92 and *Réponse aux secondes objections, axiome X*, vol. IX, p. 128.

³⁹ *Prin. Phil. Pars I*, 12, cor. II of 12, 13 and 14; I, 169, 170, 171.

divine causality be ignored, it should be recalled that Spinoza had sounded a warning in the *Prolegomenon*. What of those who argue in this fashion: since we can not know God to exist *per se*, we can never be certain of anything, not even that God exists? For all things are uncertain so long as we are ignorant of our origin, and from uncertain premisses nothing certain can be concluded. Spinoza fears that Descartes's reply to this will be unsatisfactory to some. Descartes had said that although we do not yet know whether the author of our nature has created us such that we may be deceived even in those things which seem most evident, still we can never be doubtful concerning those things which we understand clearly and distinctly, through themselves or through reasoning, so long as we attend definitely to them or to the reasoning. But we can be doubtful concerning things which we have demonstrated at some time to be true, if we recall them when we are not thinking or have forgotten the reasons by which they were deduced. In this way although we can not know God to exist *per se* but only *per aliud*, we are able to attain to a sure knowledge of God's existence as long as we attend very accurately to all the premisses from which we conclude it.

This reply is not wholly satisfactory to Spinoza. The one which he adds takes a revealing significance from the emphasis of the changes it makes. The certainty of our own existence occupies a primary place as truth, since it holds even if we assert the author of our nature to be a shrewd deceiver or bring some other reason in things outside us for doubting. The truths of geometry do not enjoy such a status of certainty, since they may be false if God deceives us. "For it is equally easy for him who does not have a true idea of God, which we suppose we have not as yet, to think his author is a deceiver, as for him who has no idea of a triangle to think that its three angles are equal to two right angles or not. Therefore, we concede that we can be absolutely certain concerning no thing except our own existence, even though we attend carefully to the demonstration of it, as long as we have no clear and distinct concept of God which makes us affirm God to be supremely veracious, just as the idea which we have of a triangle com-

pels us to conclude that its three angles are equal to two right angles. But we deny that on that account we are unable to come to the knowledge of anything. For as is evident from all the things that have been said so far, the hinge of the whole matter turns on this alone, namely, that we are able to form a concept of God which so disposes us that we can not as easily think him to be a deceiver as not to be one.”⁴⁰ To form such an idea of God any thinking is sufficient, for all thinking implies it. But once it is made explicit, there are more solid grounds of certainty for thinking. If mathematics is to presume to undoubted truth, it is on this warrant. Moreover, our existence too is made possible by the efficacy of God, so that our first truth, that of our own existence, is involved in this concept. We might as easily doubt our own existence as continue to doubt the existence of God. “Nor will it be less impossible for us, when we attend to the idea of God (which we now suppose ourselves to have found) to think he is a deceiver than when we attend to the idea of a triangle to think its three angles are not equal to two right angles. And just as we can form such an idea of a triangle although we do not know whether the author of our nature is deceiving us, so we can restore to ourselves and place before our eyes a clear idea of God although we doubt whether the author of our nature deceives us in all things. And if only we have that idea, whatsoever the manner in which have acquired it, it suffices, as has already been shown, to remove all doubt. These things having been considered thus in advance, I reply to the difficulty indicated: We can be certain concerning no thing, not merely so long as we ignore God’s existence (for we have not yet spoken of this thing), but so long as we do not have a clear and distinct idea of him.”⁴¹

This is an unmistakable reinforcing of the bases of certainty by emphasizing the formal and causal foundation of

⁴⁰ *Prin. Phil. Pars I, Prolegomenon*; I, p. 147-148. Cf. *Cog. Meta. I, 2*; (*I, 239*), “*Quæri adhuc posset, quomodo nos, nondum intellectâ naturâ Dei, rerum essentias intelligamus, cum illæ, ut modo diximus, a solâ Dei naturâ pendeant. Ad hoc dico, id ex eo oriri, quod res jam creatæ sunt: si enim non essent creatæ, prorsus concederem, id impossibile fore, nisi post naturâ Dei adæquatam cognitionem: eodem modo ac impossibile est, imo magis impossibile, quam, ex nondum notâ naturâ Parabolæ naturam ejus ordinatim applicatarum noscere.*”

⁴¹ *Prin. Phil. Pars I, Prolegomenon*; I, 148-149.

ideas. After such reiteration, the test for truth is intelligible in detail: whatever is clearly and distinctly perceived is true. Spinoza is eventually in his *Treatise on the Correction of the Understanding* to adopt the same formula, but considerations which he makes explicit separate radically the meaning he is to give it from the cartesian sense which he analyzed and expounded in the *Principles*. Spinoza can repeat in the setting of his own philosophy expressions which Descartes used, and though the words remain precisely the same, the significance may be altered completely. It would require a translation into other terms to express a notion of the cartesian philosophy to fit it in the system of Spinoza, and so, on the other hand, identical phrases have different implications and meanings in the two systems. In this case Descartes had constructed a general rule for truth on the analogy of the first truth, namely, that I am: its guarantees were to be found in the eminent and transcendent causality of the perfect being who must also be necessarily. For Spinoza the guarantee of the same rule was in the immanent, and not the transcendent, causality of God. Things known distinctly were perceived truly because clear knowledge is possible only of things which either are united to our being and are known directly, or of things which are limited by the same conditions as circumscribe our nature, so that our general notions can embrace the whole circumstance of their being. We can, in other words, either know things directly, or else form definitions of things by means of generalities constructed by analogies to ourselves.

The appeal of certainty, consequently, in both Descartes and Spinoza goes back finally to God. Spinoza was insistent that the only basis of knowledge must be the sum and source of intelligibility. Descartes was concerned with liberating himself from doubt; he found the beginning of knowledge in the consciousness of self; if that certainty is to be analyzed its basis must be sought elsewhere, in God. For Spinoza the knowledge of body, of mind and of God are in the same act, for the mind of man is the intellect of God determined in particular circumstances to think of this one body. As its knowledge of things is increased, the mind's acquaintance with God also

is deepened. Doubt, in the system of Spinoza, is only a vacillation of the mind and can in no way advance the search for truth. It would be absurd to try to start his system in universal doubt; doubt could not be used even as a regiminal cure for errors, for the mind begins with a certainty, and if it is careful, may proceed safely among certainties.

These metaphysical beginnings of Descartes's system were consequently so far removed from Spinoza's convictions that the dangers they encountered must have been clearly present to his mind. The doctrines are exactly those he attacks elsewhere, but here, since the demonstration is sympathetic, he employs subtle devices and precautions, of which Descartes had not anticipated the need, against difficulties which his own system avoided. In his own philosophy, mind is not isolated with only spiritual instruments in a physical world to which they must be made somehow to apply; the laws by which an object is and those by which it may be known are the identical conditions of its being. But Descartes considers in turn the laws of motion which regulate the physical world and the spiritual laws by which the mind operates. Thought is taken up separate from things; and the *formal* physics of scholasticism is supplemented by one in which actions and bodies are considered in only physical terms; to the soul, in turn, and to spiritual activity, only the relations of ideas are referred. Many of the contradictions of scholastic psychology and scholastic physics are removed, but other difficulties arise; the mind must know, among other things, a world of bodies; the mind knowing must think, the thing known must exist. Yet "mind and body are distinguished in reality,"⁴² for they are substances and each is possessed of being, but independent and apart from the other. Eventually the problem of the relation of the two must force itself forward. The elements of the difficulty had been there from the first: the conception of substance, though substance is defined by both Descartes and Spinoza to be that which requires for its being no other thing than itself, is different in the two systems. Far from deriving the being of all things from a single substance, Descartes

⁴² *Prin. Phil. Pars I, 8; I, 167.*

saw a real distinction in nature, and the plan of his system is determined by his recognition that the being of thinking substance implies the being of a perfect substance and the co-existence of a corporeal substance. The entire plan of Spinoza's demonstration of the principles of Descartes's philosophy is fixed by this necessity of proving in turn the substantiality of the *I* that knows, of God, and of bodies. This classification of substance, Spinoza follows in the *Metaphysical Reflections*: "We divide substance into two *summa genera*, namely thought and extension, and thought into created or the human mind, and uncreated or God." ⁴³ Then having discussed God and his attributes, he remarks, "it is time now to pass on to created substance which we divide into extended and thinking. By extended substance we understand matter or corporeal substance. By thinking substance we understand only the human mind." ⁴⁴ The problem needs no other statement than this, save perhaps the recollection of a definition: "Two substances are said to be distinguished really when each can exist of itself apart from the other." ⁴⁵ And the test of truth which has been stated takes its significance from just these considerations: our own being is known indubitably, God's being is involved in our self-knowledge, the God who is known thus, must be known to be veracious: whatever we conceive clearly and distinctly is true.

There are crossings of purpose here which are sharp enough to explain Spinoza's reluctance when he was urged to write Book I of the *Principles of Descartes's Philosophy*. The sections he had set in mathematical form for his pupil took up, first the universal principles of nature, second, the multiplex things that follow according to those principles. This section of the *Principles*, Books II and III, is devoted to an attempt to explain the universe by a single mechanical principle, and so stated, it expresses the whole physical truth as Spinoza conceived it at the time of the writing of the book. To set at the head of it, however, the cartesian principles on which it could be made to depend involved a process of dialectical translation. Spinoza himself sought

⁴³ *Cog. Meta. Pars II*, 1; I, 249-250.

⁴⁴ *Cog. Meta. Pars II*, 12; I, 275.

⁴⁵ *Prin Phil. Pars I*, Def. X; I, 151.

an explanation of the physical chain of causation which would need no intervention save physical causes. Descartes's physics could furnish him that; consequently there was nothing in this part of the work with which he would have to disagree. But the cartesian physics changes its meaning in Spinoza's use of it. For it is sufficient for him to observe that infinite things in infinite modes proceed necessarily from the necessity of the divine nature, that the order and connection of ideas is the same as the order and connection of things, and that things vary only in terms of quantities of motion and rest. Then the geometry of physics can be expressed in the long chains of unrolling reasons which were the ideal of science. The nature of God and his attributes accounted sufficiently for the existence of things, but in the cartesian system the physical sciences face the problem of the demonstration of extended substance. This third step of the cartesian philosophy may be made now. Spinoza recognized its importance; he undertakes to prove the two significant aspects of it: first, "Substance extended in length, breadth and thickness exists truly" ⁴⁶; then, implied in that existence, in fact, a co-ordinate part of the proposition which states it, he adds the particularization, "and we are united to one part of it." The existence of extended substance is demonstrated by an appeal again to the principles of causality. "Extended substance, so far as it is clearly and distinctly perceived by us, does not pertain to the nature of God. But it can be created by God. Moreover, we perceive clearly and distinctly (as every one finds in himself so far as he thinks) that extended substance is sufficient cause for producing in us titillation, grief and similar ideas or sensations, which are produced in us continuously, even when we are unwilling; and if we try to set up some other cause of our sensations besides extended substance, such as God or an Angel, we immediately destroy the clear and distinct concept which we have. Wherefore as long as we attend to our perceptions so that we admit nothing except what we perceive clearly and distinctly, we will incline or rather we will be very little indifferent to agreeing that extended substance is the only cause of our sensations; and further to

⁴⁶ *Prin. Phil. Pars I, 21; I, 179.*

affirming that extended substance, created by God, exists. And in this clearly we can not be deceived: Wherefore it is affirmed truly that substance exists extended in length, breadth and thickness." ⁴⁷ Extended substance is proved to exist by the fact that I can not be the cause of my own sensations and that any other explanation of them than that suggested in the clear perception I have, would involve questioning at once the clarity of my perception and the goodness of God. There remains the demonstration of the second part, that I am united closely to one part of matter and not to other parts; this can be proved by the fact that there is a great difference among the sensations produced in me by extended substance, such as when I say I feel or see a tree and when I say I am thirsty or I am pained. Such a difference can be understood clearly and distinctly only by understanding that I am united to one part of matter.

The difference of the rôles which the principles of nature, the rules of motion, were to play in the philosophies of Descartes and Spinoza can be appreciated by comparing this demonstration, in which Spinoza exhibits succinctly the essence of the cartesian proof, with the demonstration he has already given in the *Short Treatise*.⁴⁸ For Descartes he had to insist on the necessary veracity of the idea, involved in our perceptions themselves, of their sufficient cause; for himself it is sufficient to know that God is and that he is an infinite being of infinite and perfect attributes to know that there is a body in nature. The second part, namely that we are united to a body, requires no proof for Spinoza; mind is nothing other than the idea of a body actually existing. So definitely was he convinced of this, that he could close his demonstration of the cartesian metaphysics only with a sardonic note of warning concerning these speculations. The last words of Book I, following immediately on the proof that we are united to a body, are these: "Note, — Unless the reader considers himself here only as a thinking thing and without body, and unless he lays aside as prejudices all the reasons which he previously

⁴⁷ *Prin. Phil. Pars I, 21, dem.; I, 179-180.*

⁴⁸ *Short Treatise, Pt. II, ch. XIX. p. 119.*

held for believing that the body exists, he will try in vain to understand this demonstration.”⁴⁹

IV

AFTER these preliminary considerations the cartesian physics may be examined. Once the metaphysical superstructure has been disposed of, the attraction it must have had for Spinoza is clear — as are also the translations it must undergo in its restatement in his system. So far as the phenomena of nature are concerned, apart from their metaphysical background, Spinoza was convinced as was Descartes that physical events could be explained entirely in terms of physical causes, that there was need of no intervention, and that the changes of nature take place in an unending series of finite bodies transferring motion.⁵⁰ Consequently when the concern is with a physics susceptible of geometric statement and when the conviction is that body is sufficient to explain all phenomena of the material order, Spinoza is cartesian. However the conception of extension be derived, whether as an attribute of God or as a result of God's activity, it alone makes possible a true science of physics. By reducing the multiplicity of bodies to modes of a single extension, an explanation of differences by homogeneous laws is possible, and physics may thus be reduced to mathematics. Extension means chiefly that bodies, extended in three dimensions, in motion, operate and affect other bodies in fixed and constant ways. The laws of how they operate and how they influence each other are precisely the laws that philosophy should set out to discover. “The philosopher does not seek what God can do by his supreme power, but judges concerning the nature of things according to the laws which God has set upon them: wherefore he judges that to be fixed and reasoned which he concludes from those laws to be fixed and reasoned.”⁵¹ There are certain general laws to be dis-

⁴⁹ *Prin. Phil. Pars I*; I, 180.

⁵⁰ Cf. *Prin. Phil. Pars II*, 8, Cor.; I, 198 and Lemmas of Book II of the *Ethics*; II, 97 ff.

⁵¹ *Cog. Meta. Pars II*, 12; I, 276.

covered applicable to the whole of extension; according to them all phenomena can be consistently explained. That uniformity is to be found in all extension whatever the dependence of extension on God; moreover whether extension be an attribute of God or a substance dependent on God, matter is real, indefinitely extended, and the matter of heaven and of earth is one and the same.⁵² Matter throughout is to be considered only as extension and the laws of its operation are to be everywhere uniform. "We have thus far dealt with the nature or essence of extension. We have demonstrated in the last proposition of the First Part that it exists created by God such as we conceive it; and from Proposition 12 of the First Part it follows that it is now conserved by the very power by which it was created. Then in that same last proposition of the First Part we demonstrated that we as thinking things are united to some part of that matter, by means of which we perceive that there are given actually all those variations of which, from the contemplation alone of matter, we knew it to be capable, such as divisibility, local motion or the migration of one part from one place to another, which we perceive clearly and distinctly, provided we understand that other parts of matter succeed in the place of those migrating." ⁵³

Part II of the *Principles* then is concerned with the nature of motion, precisely because in terms of motion all the events of the material or extended world can be explained. The sequence of discussion is clear: first the nature of motion is considered; having determined that all motion is local, its peculiarities are examined.⁵⁴ Second the causes of motion are considered. They are two-fold: the primary or general cause of all the motion in the world, and the

⁵² Cf. *Prin. Phil. Pars II*, 6; I, 191.

⁵³ *Prin. Phil. Pars II*, 6, sch.; I, 191-192. This was to remain for Spinoza the basis of the physical sciences, however far he departed from cartesian principles. Compare, for example, the statement of it which he made for Descartes—"Materia est indefinite extensa, materiaque cæli, et terra una eademque est" with those constantly invoked in his own physics, as—"Præcipue si ad hoc etiam attendatur, quod materia ubique eadem est, nec partes in eadem distinguuntur nisi quatenus materiam diversimode affectam esse concipimus, unde ejus partes modaliter tantum distinguuntur, non autem realiter." (*Eth.* I, 15, sch.; II, 59.)

⁵⁴ *Prin. Phil. Pars II*, propositions 1-11.

particular causes by which single parts of matter happen to acquire motion which they did not have before.⁵⁵ God is the principal cause of motion. Consequently the nature of motion is determined directly from God, and the important properties of matter and motion are to be demonstrated on proofs that move from him. Thus by the concurrence of God it is shown that every thing, so far as it is simple and undivided and considered in itself alone, perseveres always in the same status. It is shown, moreover, that every moved body tends of itself to continue to be moved in a straight line and not in a curved one, precisely because a curved motion would take a longer time and since motion is procreated every moment by God we can never attribute a duration to motion such that a lesser duration may be conceived.⁵⁶ When, however, questions of the determination of motion in any given direction are taken up it is no longer a question of the nature and essence of motion, and therefore the source of motion in God need not be considered, but the peculiarities of determined movement (such as movement in circles) and the transfer of motions and the measurement of the quantity of motion or force (*vis*), must be determined by the rules of a physical geometry of forces. Only in a general sense is motion determined by, and therefore to be referred to, its primary cause or God, and this is only equivalent to saying that the laws of motion are stable and unchanging and that physical bodies operating according to those laws are sufficient causes of all material phenomena. The primary cause guarantees the principle of the conservation of matter (for matter is indefinitely extended), the principle of the conservation of energy⁵⁷ and the principle of a reciprocity and uniformity of causal relations. One final consequence of the concurrence of God is the necessity of a principle of economy: "when the modes of any body are forced to undergo a variation, that

⁵⁵ *Prin. Phil. Pars II*, 11, sch.; I, 200.

⁵⁶ *Prin. Phil. Pars II*, 14 dem; I, 201-202.

⁵⁷ *Prin. Phil. Pars II*, 13; I, 200. Cf. "We have said that God conserves the same quantity of motion in nature. Wherefore if we regard the whole nature of matter, nothing new happens to it. But in respect to particular things, it can be said in some manner that something new happens to it: which does not seem to take place in spiritual things; for they do not appear to depend on each other in that fashion." (*Cog. Meta. Pars II*, 11; I, 274).

variation will always be the least that can be given." Only after these consequences of God's activity are considered, is there a detailed demonstration of Descartes's seven rules of motion.⁵⁸

It is significant that these demonstrations of the rules by which bodies of varying masses and velocities, meeting each other, will continue to move or be deflected, should come at the very close of Part II of the *Principles*. These are the rules of activity of a general *natura naturata*, derived from God, themselves unchanging but regulating, as laws, all changes. They are equally applicable for Spinoza or for Descartes; but Spinoza based their applicability on the fact that one of the infinite perfect attributes of God is extension, while he recognized that for Descartes they depend on "the divine power or essence which is common to the preservation of extension and of the thinking thing."⁵⁹ But whether they depend on a transcendent or an immanent cause, they can be made the basis of an explanation of all the things that follow in time, that is, of the entire material world. Spinoza would have proceeded to the actual explanation of the details of that material world, but that he had neglected one point in the dialectical preparation for Part III. Except for the scholium of the last proposition of Part II, there is no examination of the properties of fluid bodies. Ludwig Meyer remarked this omission in his *Preface*. Speaking of his hope of persuading the author to complete the Third Part he says that it would be necessary to add to the Second Part certain propositions on the nature and properties of fluids.⁶⁰ For Nature is conceived as a fluid of which all existing things are constituent particles, and the whole demonstration of the nature of things is made to depend on one postulate: "it is asked that it be conceded that all the matter out of which this visible world was composed, was in the beginning divided by God into particles as nearly as possible equal to each other, not spherical, because many globules joined together do not fill a continuous space, but into parts figured in another way and small in size or medium among all

⁵⁸ *Prin. Phil. Pars II*, 24, 25, 27, 28, 29, 30, 31; cf. also 23 and dem.

⁵⁹ *Prin. Phil. Pars II*, 2, sch.; I, 188.

⁶⁰ *Prin. Phil. Prefatio*; I, 131.

those from which the skies and the stars are now composed; and these had in them as much motion as is now found in the world, and they were moved easily; then that single particles moved around their own centers and separately from each other, as if they composed a fluid body such as we conceive the heavens to be; then that several moved together about certain other points equally removed from each of them and disposed in the same way and were the centers now of fixed systems; and finally several more, equal to the number of the planets, were moved around some others; and in this way they composed the various vortices to the number of the stars which are now in the world." ⁶¹

The postulate on which the cartesian physics is to be based is the statement of an hypothesis, and as such it does not aim, since that is foreign to natural knowledge, at the determination of what has happened actually and in what order. Spinoza's postulate would have been irrelevant or a hindrance to the discovery of the history of any thing. It is not an experimental method on which he founds his science; in fact, if his theory of the mind and its knowledge be recalled, it is obvious that experience is irrelevant to the truth of knowledge. That theory was clearly in his intention when he framed his postulate. "We say, finally, that we seek principles such that we may demonstrate that the stars and the earth and so forth might have arisen from them. We do not seek causes such as are made at random by astronomers, which suffice only to explain the phenomena of heaven. But we seek such causes as lead us to a knowledge of those things which are on earth (that is, we judge that all things which we observe to happen above the earth should be numbered among the phenomena of nature). In order to find these the following conditions must be observed in a good hypothesis: I. that it imply (considered in itself) no contradiction, II. that it be the simplest that can be given, III. as follows from the second, that it be most easy of comprehension, IV. that it be possible to deduce from it all things which are observed in all nature." ⁶² It need scarcely be insisted that although the

⁶¹ *Prin. Phil. Pars III*, post.; I, 228.

⁶² *Prin. Phil. Pars III*; I, 227.

preoccupation here is with causes, they are not such causes as might be determined by observation and experimentation. And lest there be any misapprehension concerning the nature of causes, Spinoza gives specific warning. "We say, finally, that we can assume an hypothesis from which we are able to deduce, as if from their cause, the phenomena of nature, although we know perfectly well that they did not arise thus."⁶³ In other words an explanation which will lead to an elucidation of all phenomena, may be given, though it be known that the history of the event be wholly other than postulated; a parabola may be described as a section of a cone or as generated by the movement of two lines or in some other way, without affecting the properties which any of these descriptions indicate and the statement of which is the end of any scientific inquiry. Consequently to explain the phenomena of nature, absolutely any hypothesis may be formed, provided only that it be clear and simple and that the phenomena of nature can be made to follow from it by mathematical inference. In fact, the nature of things is such, that no matter what is assumed, provided the laws of motion are followed carefully, the same phenomena can be deduced from it. The deduction may require more labor and the way may be longer, but the result must be the same. There is no danger of error from a false hypothesis. But it must be borne in mind that the laws of motion must be known at the outset of any investigation, and that they are known rather on the basis of mathematical calculation than by experimentation. Once the laws of motion are known, phenomena can be investigated confidently; the only choice which remains among all conceivable hypothesis is with the one from which all the properties of a phenomena may be deduced most readily.

The postulate on which the cartesian physics is to be founded has all the marks of a good hypothesis. It involves in itself no contradiction, since it depends only on the divisibility and mobility of material things. Moreover it is extremely simple (*simplicissima*), since it supposes no inequality or dissimilarity in the particles into which matter was divided in the beginning, nor in their motion.

⁶³ *Prin. Phil. Pars III; I, 227.*

It is easily intelligible therefore, and that intelligibility must be a cardinal point always in the Spinozistic physics. "Hence it follows that this hypothesis is extremely easy to learn: which indeed is obvious from this, that nothing was supposed by this hypothesis to have been in matter, except that which any one notes immediately from the concept alone of matter, namely divisibility and local motion. We shall attempt to show, so far as it can be done, that from this all things which are observed in nature can be deduced, and we shall do it in the following order. First we shall deduce from it the fluidity of the heavens, and we shall explain how this is the cause of light. Then we shall proceed to the nature of the sun, and at the same time to those things which are observed in the fixed stars. Then we shall speak concerning comets and planets and their phenomena." ⁶⁴

This is a project which was not to be completed, but even the statement of the plan indicates Spinoza's conception, not only of the gradations of nature, but of the methods necessary for the investigation and for the exact knowledge of nature. Through all its reaches the endless chain of causes may be examined. The Third Part of the *Principles of Descartes's Philosophy* was to have reviewed that series in detail. There seems to be nothing in the project itself contrary to Spinoza's principles, and if Spinoza had finished it, though on the face of it another man's doctrines would have been retailed, it would also have been an expression of Spinoza's convictions concerning the natural sciences. Yet eventually the fundamental difference between his metaphysics and Descartes's prevented a continued agreement even in speculations concerning physical events. The rules of motion as well as the cartesian metaphysics were at last to become impossible for Spinoza. He had disapproved of Descartes's scientific attitude the very year in which he expressed his approval of the cartesian laws of motion. When observations of the eclipses of Jupiter had led to the discovery in 1610 of Saturn's rings, Descartes had seen a problem in the discovery. By Galileo's observations the planet seemed to consist of three parts and what were later discovered to be the rings seemed to be

⁶⁴ *Prin. Phil. Pars III*, post.; I, 229.

two smaller planets close to Saturn.⁶⁵ Moreover, two years later they were to disappear entirely. This puzzle involved the entire cartesian physics and its important theory of vortices: if these were planets close to Saturn, they did not move about Saturn, and to explain their lack of motion Descartes thought he had to suppose that Saturn did not gyrate on its own axis. To Spinoza this seemed a precipitous and needless contradiction of his own principles; it would have been possible, even easy, to explain the *ansæ* if he had worked without prejudice from the fundamental principles of his physics.

The gravity and unseemliness of such tergiversation is enormous if Spinoza's conception of an hypothesis is kept in mind; no astronomical observation should have affected Descartes's principles, since nothing in experience could contradict a well-weighed rational explanation; with ingenuity the explanation could be extended to include the strange behavior of Saturn. It should be observed that this rationalist position was more easily tenable in 1665 than in 1610; Huygens had published his *De Saturni Luna Observatio Nova* in 1656 and he had explained the anagram of that work in his more thorough *Systema Saturnium* in 1659. In these treatises Huygens explained the phenomena of the *ansæ* and their alterations as results of a thin ring inclined at a considerable angle to the plane of the ecliptic, and therefore to the plane in which Saturn's path around the sun lies. On the other hand it must not be supposed that Spinoza's attitude followed only the warrant and fashion of science. It was dictated by a rational principle, and whether observation confirm the principle or disprove it was a matter of indifference; it was beyond the scope of observation. This he had stated clearly in the *Principles of Descartes's Philosophy*. There, in fact, he refers to that principle as our Method; its violation by Descartes is the more reprehensible, since he supposed it to be involved necessarily in the cartesian explanation. "Nor can the senses ever suggest any truth to the inquirer

⁶⁵ For early drawings of Saturn see, in J. J. Fahie, *Galileo, His Life and Works*, (New York, 1903), p. 109, or Fahie's article "The Scientific Work of Galileo" in *Studies in the History and Method of Science*, ed. by C. J. Singer, (Oxford, 1921), p. 238.

other than the phenomena of nature by which he is determined to investigate the causes of those phenomena: they can never show anything to be false which the intellect understands clearly and distinctly to be true. In fact, we judge thus, and this precisely is our Method: to demonstrate the things we set forth, with reasons perceived clearly and distinctly by the understanding; further, to hold to them, whatever the senses may assert and repeat that seems contrary to them; which senses, as we said, can only determine the understanding to inquire about this rather than that, but can not convict it of falsity when it perceives something clearly and distinctly." ⁶⁶

Yet in 1676, eleven years after giving almost complete allegiance to those laws, Spinoza is reported to have engaged in a conversation concerning "the faults in the rules of movement of M. Descartes." ⁶⁷ It is significant that the change of attitude was induced by no physical experimentation, though this was the age of the birth of science; metaphysical contradictions which had been implicit in the position were becoming clearer. This is expressed unmistakably in a letter written the same year to Tschirnhaus, and in the letter it is evident too that the change is neither a gradual nor a recent one. "Besides, from extension, as Descartes conceived it, that is, as a quiescent mass, it is not only difficult to demonstrate the existence of bodies, as you say, but wholly impossible. For quiescent matter will, so far as in it lies, persevere in its quiet, nor will it be stirred to motion except by a more powerful external cause; and for this reason I did not hesitate to affirm some time ago (*olim*) that the cartesian principles of things are useless, not to say absurd." ⁶⁸ Spinoza had had no difficulty in the *Short Treatise* demonstrating the existence of bodies, but his proof depended on the conception of extension as an infinite and perfect attribute of God, and the bodies that followed had each, as a result, a definite tendency to persevere in their own existence. The cartesian principles required the conception of extension as the inert, endless

⁶⁶ *Prin. Phil. Pars II*; 6, sch.; I, 196.

⁶⁷ Ludwig Stein, *Leibniz und Spinoza*, p. 64; Brunschvicg, *Spinoza et ses Contemporains*, p. 270.

⁶⁸ *Epistola LXXXI (olim 70)* to Tschirnhaus, May 5, 1676; IV, 332.

series of bodies set in motion by the external efficacy of God. Spinoza gave up the cartesian physics, not because of the astronomical discoveries of Galileo or the explanations of Huygens, but because of a more profound contemplation of the nature of God. Descartes had not failed to account for all events that might happen, but he had failed in his promise to make physics a geometry.⁶⁹

These objections could be made in line with Descartes's own principles, and indeed in Spinoza's handling of the demonstration of them, they seem to be the development of the cartesian notion of the indefinite divisibility of matter.⁷⁰ In his own right Spinoza would have insisted upon a further point, which is the very observation that endangers the cartesian structure of an inert material substance, that

⁶⁹ Brunschvicg insists on the parallelism of scientific discoveries to Spinoza's change of attitude. Huygens had made Spinoza acquainted in 1665 with the observations of Cassini relative to the satellites of Jupiter; in August, 1675, he suggested and in a short time withdrew, the thesis that the movement of light requires time; in November of the same year Roemer read a dissertation to the Academy of Sciences in which he proved by immersions and emersions that the propagation of light was not instantaneous. But Descartes had written (in a letter dated August 21, 1634, that the negation of instantaneous propagation of light would overturn his philosophy completely (vol. I, 308). Brunschvicg concludes that these discoveries destroyed the cartesian conception of time as indivisible instants containing each its individuality of elementary movement; the power of a creator is required to bind instant to instant and movement to movement. (Cf. Brunschvicg, *Spinoza et ses Contemporains*, pp. 270 ff.) However, it is important that in the letter in which Spinoza speaks of his conversation with Huygens, far from being overwhelmed by the weight of experimental evidence, he writes to disagree with Huygens, even more than with Descartes. Furthermore, Spinoza did not wait for the inspiration of science to modify the cartesian analysis of time. As early as the *Principles of Descartes's Philosophy* he takes up precisely that question to consider the paradoxes of Zeno (*Prin. Phil. Pars II*, 6, sch.; I, 191 ff.) Zeno is involved in two errors. "*Primo igitur supponit corpora adeo celeriter posse concipi moveri, ut celerius moveri nequeant. Secundo tempus componi ex momentis, sicut alii componi quantitatem ex punctis indivisibilibus conceperunt. Quod utrumque falsum.*" (*Ibid.* p. 193.) It is contrary to reason to think that a motion can be conceived so rapid or a time so short that a more rapid motion or a shorter time can not be given. This objection is applicable equally to the two arguments of Zeno which Spinoza takes up: that if motion in space were given, the motion of a body being moved circularly with the greatest speed does not differ from rest; and that if a body is moved, it is moved either in the place in which it is or in the place in which it is not, but not in the place in which it is, for if it is anywhere, it is at rest, and not in the place in which it is not, consequently the body does not move. The answer depended on no scientific discovery but on a metaphysical concept, that of time. "*Si vero tempus in eo sensu, quo supra explicui, sumit, id est, suo vero sensu, nunquam tam parvum tempus posse assignare, quo quamvis etiam vel indefinite brevius ponatur, non posset corpus locum occupare et mutare, quod satis attendenti est manifestum.*" (*Ibid.* p. 195; cf. *Epistola XII* (olim 29) to Meyer; IV, 55 ff.)

⁷⁰ Cf. *Prin. Phil. Pars II*, axioms 6, 9, etc.; I, 184.

there is inherent in and characterizing each part of matter, necessary motion, the *conatus*, which needs no further explanation than the derivation of matter from an infinite attribute of God. That would account for the active disposition observed in all bodies. Since Motion is a general *Natura Naturata*, movement should be an essential characteristic of the particular *Natura Naturata*. For Descartes the *conatus*, like all other effects, is explained by its dependence on the activity of God. This, moreover, is an explanation which had occurred to Spinoza even before his demonstration of Descartes's philosophy. He states it clearly in the *Metaphysical Reflections*. "Indeed these two [the thing itself and the *conatus* which is in the thing for the conserving of its being] although they are distinguished by reason or rather by words, which fact deceives those [who make this inquiry] a great deal, are not at all to be distinguished in the thing itself. In order that this be understood clearly, let us set down the example of some very simple thing. Motion has the power of persevering in its status; this power clearly is nothing other than the motion itself, that is, the nature of motion is such. If then I say that there is nothing other in this body A than a certain quantity of motion, it follows clearly thence that as long as I attend to that body A, I must always say that that body is moved. If I should say that it had lost some of its power of moving, I necessarily attribute to it something other than that which we supposed in the hypothesis by which it loses its nature. But if this reason seem somewhat obscure, let us concede that this *conatus* of self-movement is something other than the laws themselves and the nature of motion."⁷¹ J. Clerk Maxwell was to find, some centuries later, a somewhat similar distinction at the basis of elementary mechanics; it was that, he felt, which distinguished newtonian physics from preceding systems.⁷² Descartes had erroneously supposed that the sole essential property of matter is extension in length, breadth and depth. He had correctly asserted the primary property of matter in the First Law of Nature:⁷³ "That every individual thing, so far

⁷¹ *Cog. Meta. Pars I*, c. 6; I, 248.

⁷² Maxwell, *Matter and Motion*, New York, 1892, pp. 25-27.

⁷³ *Princip.* II, 37.

as in it lies, perseveres in the same state, whether of motion or of rest." Newton's contribution consisted precisely in elaborating a proper understanding of the words "so far as in it lies"; Descartes never came to an understanding of his own words. Unfortunately however Maxwell condemns Spinoza too of the sin of Descartes. "This error runs through every part of Descartes's great work, and it forms one of the ultimate foundations of the system of Spinoza."⁷⁴ The truth is quite the contrary; Spinoza's work is fundamentally a metaphysical elaboration of a criticism of Descartes's physics in the direction in which Maxwell says the great originality of Newton lies.

V

THE particular *Natura Naturata* which follows from the Understanding has an active quality equivalent to that of the bodies which follow from the other general *Natura Naturata*. Since idea and thing undergo histories which are identical, they will present the same resistance to external change and the same tendency to continue in their present states. Descartes had dealt separately with each of these elements: his explanation of the corporeal world was to employ only mechanical principles and avoid the intervention of final causes and unknown forces; he was to explain thought at the same time by spiritual principles which would preserve its freedom for the soul. Perhaps the weakness of Descartes's philosophy resulted from the successful realization of this most important of his ambitions. When both tasks had been performed there remained no device by which the mind might come to know things or by which the body might influence thought. Emotions and knowledge, in any but their formal aspects, were equally difficult to explain. Therefore, even from the first, Descartes's explanation of the soul and its passions was of little service to Spinoza, for all his readiness to accept the laws of motion.

This was true even at the time of the composition of the *Short Treatise*, in which the treatment of the passions has

⁷⁴ *Ibid.* pp. 26-27.

such a cartesian look.⁷⁵ The doctrines of the soul which have been worked out in a philosophy which considers God a transcendent cause are more difficult to translate into the terms of God as immanent cause than are the corresponding doctrines of physics. In either philosophy, the soul is to turn toward God, and his efficacy is remarked more precisely and immediately in the series of caused ideas than in the series of caused events. In 1661, before the *Principles of Descartes's Philosophy* was even planned, Spinoza was already aware of the impossibility of the cartesian conception of God and of the human mind. When Oldenburg asked him what important errors he saw in the philosophies of Bacon and Descartes, he had no hesitation, though he protested it was not his custom to disclose errors in the philosophy of other men, to enumerate three.⁷⁶ First and most important, he says that they have strayed far from the knowledge of the first cause and origin of all things; that, in the second place, they did not know the true nature of the human mind; and that, finally, they never grasped the true cause of error. Knowledge of these points is absolutely essential to true knowledge. Moreover the intimacy of the relation of true knowledge of God to knowledge of the human mind can be gathered from the fact that Spinoza insisted that the first two of these errors, those related to God and the human mind, are apparent from the consideration only of the nature of God and of substance, or more precisely, from three propositions concerning substance: that there can be only one substance, that existence pertains to its essence, and that all substance must be infinite or supremely perfect of its kind. The third error is derived from a similar source: if God is considered to be a transient cause, it is possible to conceive the will as free. This Descartes does, and he attributes the cause of error to the fact that the will may extend further than the intellect. The futility of such a doctrine is summed up for Spinoza in the consideration that will differs from this or that act of will only as whiteness differs from this or that white, or

⁷⁵ Boehmer, Sigwart and Wolf have pointed out that Spinoza follows in his exposition of the passions, in all save a few details, the order of parts II and III of Descartes's *De passionibus Animæ*. Cf. the comparative list, Wolf, *Short Treatise*, p. 207.

⁷⁶ *Epistola* II to Oldenburg; IV, 8.

humanity from this or that man. Since it is a thing of the reason, the will can no more cause volitions than humanity can cause men. Therefore particular volitions, far from being free, need causes in order to exist and are necessarily such as their causes determine them to be. Finally since Descartes insisted that errors themselves are particular volitions, it follows that errors are not free, but determined by external causes and not at all by the will.⁷⁷ By the time the *Ethics* was being written, Spinoza felt there was no longer need to consider what Descartes asserted concerning the will and its freedom, "since I have more than sufficiently shown that it is false."⁷⁸

The symptoms then of Descartes's fundamental error in the conception of God and substance are to be observed all through his system, and although his vision of a geometric physics, his enumerations of the passions, or his statement of a mathematical method of thought might attract Spinoza, nevertheless the philosophy of which they are parts must seem to Spinoza full of oversights and philosophical contradictions. God is the first cause, and whereas ideas in minds and movements in things do flow from him, there is an insufficient sense of the bond which God's being places on the logical interrelations and the intelligible structure of things, with the result that eventually, of course, there must be involved a misconception of the human mind and the human body, and of their relations. Spinoza found it almost inconceivable, except in that it involved a very acute analysis, that so great a man should have put forth this doctrine of the nature of the mind and its union to the body. "I can not wonder enough that a philosopher who stated clearly that he would deduce nothing save what he perceived clearly and distinctly, and who moreover reproved the Schoolmen so many times for wishing to explain obscure things through occult qualities, that he should assume an hypothesis far more occult than any occult quality."⁷⁹ He finds the union of the body and the mind incomprehensible as Descartes explains it, for the one is conceived so distinct from the other that one must

⁷⁷ Cf. *Epistola* II, to Oldenburg; IV, 9.

⁷⁸ *Eth.* V, *Præf.*; II, 280.

⁷⁹ *Eth.* V, *Præf.*; II, 279.

go back to the cause of the whole universe, to God, to join them. God alone could insure that some of the thoughts formed by the perplexed mind would be true. The pineal gland is not an intelligible explanation of the relation of the body to the mind: there is no contact between will and motion and it is senseless to compare the strength of the mind with that of the body through no matter what agency. And finally, in line with this, Descartes's analysis of the human emotions and the power of the mind over them is faulty in the same way, and in it "he showed nothing but the keenness of his great intellect."⁸⁰

There are these profound differences in the psychological doctrines of Descartes and Spinoza although there are convincing surface similarities and although it is difficult, since the expressions are the same, to point to the precise variants in the analyses of the emotions. It is a question of dialectical translation again, and though the verbal differences are few, they are significant of vast divergences. Spinoza, thus, insisted that sorrow, and the passions derived from it, could never be useful to man save as a restraint to titillation,⁸¹ whereas Descartes held that sorrow is in a sense more necessary than joy. Spinoza saw sorrow as an indication that the body had failed to maintain its status of perfection but had undergone a transition to a lesser perfection than it had had; but Descartes considered sorrow only as a warning to the soul of dangers from which it must turn. For Spinoza the emotions are explicable parts not only of us but of all nature, and so, are fragmentary indications of the whole scope and relative shift of things; for Descartes they are one manner in which the presence of a world of matter is signalized to the mind, and their explanation requires an inquiry not into the system of things but into the difficult border phenomena that lie between the known realm of matter and the known realm of spirit. With this difference, Spinoza can express his definitions of the passions in the words of Descartes: in his works the definitions will take a meaning distinct from their meanings in Descartes's works. In the background there is the problem of whether there can be more

⁸⁰ *Eth.* III, *Præf.*; II, 94.

⁸¹ *Eth.* IV, 41 and 43; II, 241, 242.

than one substance, or stated in other terms, the problem of the nature of the human mind and its capacities in the world in which it is placed.

It is concerning these metaphysical points that Spinoza thought the reader should be warned. He did not hold the opinions he expounded in the *Principles of Descartes's Philosophy*, but in many cases held the exact opposite; Meyer repeats this warning, and professes to give only samples of Spinoza's position in some problems concerning which he is forced to express the contrary to his opinion, yet those enumerated are symptomatic and important. Spinoza could not hold with Descartes that the will is free and determined by no limits and that error is due to this freedom.⁸² Yet he states that doctrine in the *Principles* and demonstrates it satisfactorily, though he did not consider the will to be distinct from the intellect and certainly not to be endowed with liberty. "For in asserting these things Descartes does not prove so much as he supposes that the human mind is an absolute thinking substance (*substantia absolute cogitans*). On the other hand our author admits that there is in the nature of things a thinking substance, but he denies that that constitutes the nature of the human mind. He insists that just as Extension is determined by no limits, so Thought is determined by no limits; and so, just as the human body is not extension absolutely but only extension determined in a certain manner (*certo modo*), by motion and rest according to the laws of extended nature, so also the human mind or soul is not thought absolutely but rather thought determined in a certain manner by ideas according to the laws of thinking nature, which thought he concludes is given necessarily when the body begins to exist."⁸³ The will can not be distinct from the intellect nor can it be free. In fact, the very faculty of affirming and denying is purely fictitious. Ideas as they arise will affirm and deny consequences; beyond this there is no will.

Spinoza was as cartesian in the first of his works as he was ever to be. He underwent no gradual growth away from a master he had once revered. Even where his allegiance had been most complete, in physical doctrines, his

⁸² *Prin. Phil. Pref.*; I, 132.

⁸³ *Prin. Phil. Pref.*; I, 132.

changes were only the development of the implications of metaphysical convictions he had held from the first. His consideration of the philosophy of Descartes in the *Principles* shows a fine and detailed awareness of the niceties of the problems it encountered; his demonstrations are merely more rigorous than those Descartes used; they never depart from the spirit or go beyond the intellectual requirements of the philosophy. But there were in his mind the precise reservations he would insist on; here the mathematical method was a dialectical application which demonstrated doctrines which he considered to be true only in part. Yet by an unfortunate irony Spinoza's philosophy has been labelled in the history of thought the logical culmination of the doctrines of Descartes.⁸⁴ There are no greater nor any different marks of Descartes's influence in the *Ethics* than can be found in the *Short Treatise*, and the criticisms of the *Ethics* are all worded as only firmer expressions of ancient doubts. The indications of Spinoza's indebtedness to Descartes are to be remarked in a casual reading of any of his works, for all of Spinoza's writings bear at least a distinct mark of the cartesian influence. In many instances even the language is similar, and if it were a question only of verbal parallels, the list of borrowings might be made impressive. But the differences behind the identical phrases are neither accidental nor unimportant. Spinoza had gone to Descartes for the instruments to aid him in his attempt to explain the universe by a single logical principle. He took from Descartes a demonstration of the laws of motion, from which he departed gradually, a definite conception of the geometric method, and with them a conviction, to which he was more literally faithful than Descartes, that truth, no matter how remote and concealed,

⁸⁴ Freudenthal, *Spinoza, sein Leben und seine Lehre*, p. 119, thus insists that the spirit of Spinoza's philosophy is cartesian, though the framework and expression of his thought are borrowed from scholastic philosophy. In support of this view he quotes Spinoza's strictures against the inanities of scholastic conceptions. But a distinction must be drawn. Descartes too was violent in his criticisms of scholasticism, but this was the somewhat corrupt scholasticism of the sixteenth and seventeenth centuries; scholastic precedents may be found for most of his innovations, and where scholasticism fails there are augustinian antecedents for his thought. (Cf. Gilson, *Index Scolastico-Cartésien*, (Paris 1912); and Koyré, *Descartes und die Scholastik* (Bonn 1923). Then, too, Spinoza's criticism of Aristotle was acrid, yet in many respects his philosophy is surprisingly aristotelian.

could be arrived at by a process of mathematical reasoning. The basic dualism of the cartesian universe could arouse him to no philosophic interest, and so the implications of it are lost. Why need thought and body be reconciled, when only the consideration of thinking must show that for ideas, even fragmentary and inadequate ones, to be what they are, they must be in the system of things; that thinking involves essence; that for the mind to be implies not only the whole rationality of the plan it explores but also the existence of the corporeal world in which, at least to this extent, it is placed; that the rationality by which all things exist by fixed laws is the same rationality that the mind finds when it knows truly? The problem of an irremediable dualism is irrelevant to this metaphysical conception. The very posing of the problem involves a metaphysical insensitivity and insubtlety: thinking substance incommensurable with extended substance until a third substance, God, is superimposed to reconcile them: the body, when it has other connection with the mind than to disturb thinking, influential only by the mysterious activity of the unexamined pineal gland.

Most particularly the high enterprise of philosophy and the search for truth take on different aspects. For Descartes the power of distinguishing truth from error is limited, since it depends on the concurrence of our understanding and our will; moreover, since the mind is turned to the consideration of a universe alien to it, it recognizes what truth it finds to be the fruit of God's efficacy; certainty therefore reposes on the guarantee of God. The fact that we think is a sign for Descartes that God is good and that consequently what we know is true; for Spinoza it can mean only that we are rational creatures placed in an intelligible world. Spinoza could recognize no limitation to knowing, for our power of knowing is the very power of God, placed in particular circumstances. The human mind is not Thought, but it is Thought particularized to a limited situation. So for Descartes and Spinoza the method as well as the end of thought must be different. Descartes must be cautious in the rôle he gives to thinking; he remarks from time to time certain things which surpass human comprehension, whereas Spinoza, Meyer assures

us, "believes that all these things and even many others more sublime and subtle, can not only be conceived by us clearly and distinctly but can also be explained completely if only the human intellect is led to the investigation of truth and the knowledge of things by a way other than that which was opened up and made practicable by Descartes. So the foundations of the sciences destroyed by Descartes and those which were raised upon them by him, do not suffice to unknot and solve all the most difficult questions which come up in metaphysics, but others are needed if we want our intellect to advance to that summit of knowledge."⁸⁵

⁸⁵ *Prin. Phil. Præf.*; I, 132-133.

CHAPTER IV

SPINOZA AND EXPERIMENTAL SCIENCE

I

IT WOULD be difficult wholly to forget while reading his correspondence that Spinoza lived in the century which saw the birth of modern science. He is concerned frequently in the parts of his letters that have come down to us with the problems of theology and metaphysics, but frequently too his comments turn to the men and the problems of the early movements of science. Nevertheless one finds little commentary, in discussions of Spinoza on the peculiarities of the environment of his century. Or if they are insisted on, by what amounts almost to a fatality, either an indifference to and an ignorance of the methods of science are discovered in his remarks and lamented, or else he is assigned facilely to a place of a little honor for yeoman service, the minutiae of which are now unfortunately antiquated, among the pioneers of science!¹

For the most part Spinoza was aware clearly and in detail of the intellectual currents of his age. He followed with interest the beginnings and the progress of science, and what has been taken for indifference and ignorance, is a definite and clearly thought-out heterodoxy. His view of science permitted him to doubt the accuracy of the interpretations which early scientists and philosophers of science put on experimentation. But the centuries which have followed the seventeenth have taken up its enthusiasm for experiments and have accepted in large part its interpretation of what those experiments accomplished. Philosophers in that tradition have had no difficulty in tracing Spinoza's doubts to misconceptions; and if it were a question only of that, it would be of small matter; one might even acquiesce easily in drawing the nets of

¹ See note to page 6.

crossing influences and say he was an experimentalist since, despite his criticisms, he was of course influenced by Bacon and Descartes. But as there grew from the denial of the name of cartesian to Spinoza something more than a question of nomenclature, so too what seem minor differences in his interpretation of science are at bottom important metaphysical distinctions. He had no facile *a priori* disdain for empirical methods. He was too much interested in the problems of method and validity to neglect the claim of any method of knowledge. Certainly he was aware that there were empirical schools in formation, since he promised to examine "the methods of proceedings of the empirics and recent philosophers,"² and he assigned their method to a low place in the scale of certainty—to the second of the four ways of knowing. He conducted experiments himself, as is evident from his recourse to them in his controversy with Boyle.³ Colerus records in his life of Spinoza that he was interested in the habits of insects and made frequent observations with the microscope⁴ and Lucas insists that his work on lenses for microscopes and telescopes would have revealed to him "the most beautiful secrets of Optics"⁵ if death had not prevented it. One of his letters is devoted to the details of the conclusion he has come to by experimentation in a problem which he says he had already discussed,⁶ and the problem is concerned with nothing other than research in hydrostatics relative to the possible alterations in pressure and speed due to variations in the horizontal length of the tube. He was, moreover, an expert in the theory and practice of optics. Hudde and Jelles submit to him their practical difficulties in the calculation of the best lenses, the construction of telescopes, their difficulties with Descartes's *Dioptrics*.⁷ Leibniz sends him the *Notitia Opticæ promotæ* for criticism;⁸ his *Treatise on the Rainbow* is an elaborate mathematical anal-

² *De Emen, Inst.*; II, 13, note 1.

³ *Epistolæ* VI, XI, XIII, XIV, XXIX; IV, 15-36, 48-52, 63-69, 69-72, 164.

⁴ Freudenthal, *Lebensgeschichte*, pp. 61-62.

⁵ Freudenthal, *Lebensgeschichte*, p. 14.

⁶ *Epistola* XLI (olim 46) to Jarig Jelles; IV, 202. "His paucis, quid de eo, quod primo coram, deinde literis a me petiisti, experientia deprehenderim, narrabo."

⁷ *Epistolæ* XXXVI, XXXIX and XL; IV, 186-187, 193-195, 199-201.

⁸ *Epistolæ* XLV and XLVI; IV, 230-234.

ysis of the phenomena of refraction and reflection; and there is indication that his interest in the problems involved in those phenomena continued lively, since in 1676 he urges Tschirnhaus to send him from Paris whatever has been discovered recently concerning refraction.⁹

There are finally inquiries and remarks scattered all through Spinoza's correspondence, on mechanics and physics, and on astronomical observations particularly as they may relate to the cartesian system of physics. Oldenburg and Spinoza are for a long time very much concerned with the possible explanation, consistent with the cartesian system, of the movement of two newly discovered comets.¹⁰ Spinoza writes to Oldenburg also of conversations with Huygens,¹¹ of discoveries with microscope and telescope, and of determining the nature of the rings of Saturn; there had been mention too of Boyle and his treatises. Oldenburg in his next letter¹² asks concerning Huygens's pendulum clocks and also concerning the *Dioptric* and the *Treatise on Motion* which Huygens had intended to write. There is an obvious lacuna in the correspondence at this point: Spinoza seems to have answered Oldenburg's questions since in the next letter we have of Oldenburg he says, "When you speak of Huygens's *Treatise on Motion* you intimate that almost all the cartesian rules of motion are false."¹³ Oldenburg inquires once more in this letter con-

⁹ *Epistola* LXXXIV; IV, 335.

¹⁰ The discussion is opened in *Epistola* XXIX (1665) (IV, 165) when Oldenburg announces that the astronomer John Helvel of Danzig has written him that his *Cometographia* is on the press and almost ready (it was published in 1668) and that he had sent him his *Prodromus Cometicus*; the latter, which contained a detailed description of the recent comets, had not yet arrived. Spinoza expresses his doubts concerning the possibility of explaining the phenomena of the comets by the cartesian hypothesis in *Epistola* XXX (IV, 166); Oldenburg retails in reply (*Epistola* XXXI (*olim* 14); IV, 168) other astronomical intelligence, such as that all astronomers were then agreed that it was two comets and not one, but he had not yet come upon an explanation of the phenomena according to the cartesian hypothesis; *Epistola* XXXII (*olim* 15) (IV, 176) closes with a note in which Spinoza asks if astronomers hold that the comets moved according to Kepler's hypothesis or by their own motion; Oldenburg appends a postscript to *Epistola* XXXIII (*olim* 16) (IV, 179) promising that he will send shortly the opinion of british philosophers concerning the recent comet. This is the last letter before the second interruption of the correspondence, for ten years this time.

¹¹ *Epistola* XXVI (*olim* 13); IV, 159.

¹² *Epistola* XXIX; IV, 165.

¹³ *Epistola* XXXI (*olim* 14); IV, 167. The probability of a lacuna is increased by the fact that the fragment which stands in the Gebhardt edition as *Epistola* XXX did not figure in earlier collections of Spinoza's letters but was an

cerning Huygens's pendulum clocks and his trip to France. Spinoza protests in reply that it was Huygens and not he who had found fault with the cartesian laws of motion; he personally objected to only the sixth, and on that one he thought Huygens was as much in error as Descartes. He asks concerning the experiment performed at the Royal Society in this relation, and adds some information concerning Huygens's method of grinding and polishing dioptric lenses but he finds no advantage in that method; of his pendulum clocks and his trip to France he has no certain information.¹⁴ Oldenburg confesses¹⁵ that he does not understand the criticisms of the cartesian laws of motion and asks for the precise particulars in which Spinoza differs from Descartes and Huygens; he, in turn, was not present with the Royal Society when Huygens performed his experiment in confirmation of his hypothesis, but he sends a description of it, then asks for further information concerning Huygens's success in grinding and polishing telescopic lenses. Here again the correspondence is interrupted, and the detailed modifications of the laws of motion are never given. There are still other details of scientific problems and method which enter Spinoza's letters from time to time. His own pronouncements and those of his correspondents run the whole length from acute estimations of scientific procedure to naïve narratives of interesting incidents and strange cases, and it is perhaps significant of Spinoza's doctrine that it permitted, with no contradiction, on the one hand the nicely mathematical treatment of physical problems of the *Principles of Descartes's Philosophy* and the *Ethics*, and on the other a theoretically justifiable excitement over a reported transmutation of silver to gold.¹⁶

There can be no question of Spinoza's intelligent interest

extract quoted by Oldenburg in a letter to Boyle. It is to be found in *The Works of the Honourable Robert Boyle* (London, 1772), vol. V, p. 339, from which it was first quoted by Willis, *Benedict de Spinoza*, pp. 244-246.

¹⁴ *Epistola XXXII* (olim 15); IV, 174-175.

¹⁵ *Epistola XXXIII* (olim 16); IV, 177-178.

¹⁶ *Epistola XL* (olim 45) to Jelles; IV, 196-197; the transmutation had been performed by one J. F. Helvetius, author of *Vitulus aureus quem mundum adorat et orat, in quo tractatur de rarissimo naturæ miraculo transmutandi*; it is the same Helvetius who in 1687 brought out a book against the followers of Descartes, Coccejus and Spinoza. Moreover, Spinoza persisted in his enthusiasm despite the ridicule of one Vossius mentioned in the letter.

in the scientific advance of his age. But that interest is determined, naturally, by the interpretation he put on nature and the relevant solutions which experimentation might be expected to evolve.¹⁷ The ideal of science is rational, and consequently knowledge of the nature of things may be attained by reflection concerning essences; experimentation could reveal nothing essential concerning things. "Only accidental qualities which are never clearly understood unless the essences of things are previously known," can be discovered by methods of observation.¹⁸ The "method of proceeding of empirics and recent philosophers"¹⁹ consisted almost wholly in attempts which neglected that truth. Truth and the knowledge of things do not take their validity from experience or from the warrant of experimentation. If it were not for the fact that one clear and distinct perception or several clear and distinct perceptions taken in conjunction can be the cause of others, there would be no search for truth and no possibility of attaining it. But our nature involves, as its very essence, some clear and distinct perceptions; the whole process of knowledge consists in evolving by a deductive or synthetic method, the body of truth implicated in them. Any consideration of method must start with this recognition, and if science is

¹⁷ Neglect of this and a persistently experimentalist turn in his critics have done much to prevent a proper appreciation of Spinoza's scientific opinions. Thus Martineau, says, (*A Study of Spinoza*, p. 65 f.) "In truth, Spinoza's physical knowledge does not seem to have been so accurate or so large as his opportunities would lead us to expect. The reflective tendency of his genius did not permit him to pause with long patience upon the analysis of concrete facts, but hurried him away into the region of large conceptions (generals that had never been generalized) whence, as he believed, he could see them brought to the birth." This he illustrates by a naïve interpretation of the controversy with Boyle (pp. 61-62), by a mistranslation of the letter on Descartes's explanation of the rings of Saturn (p. 65; cf. *Epistola XXVI (olim 13)*; IV, 159), and finally by insisting that Oldenburg asks more questions than Spinoza answers, adding particularly his ignorance of Huygens's pendulums but scarcely noting that the letter in question (*Epistola XXXII (olim 15)*; IV, 175) was written eight years before the publication of Huygens's *Oscillatorium Horologium* and that Spinoza is saying, in fact, "I am not yet able to write anything certain concerning the success of the pendulums." We have moreover a letter of Oldenburg's (*The Works of the Honourable Robert Boyle* (London, 1772), vol. VI, p. 200) in which he seems to be better pleased with Spinoza's reply than Martineau; he writes, October 10, 1665, that Spinoza "hath very lately written to me concerning M. Huygens' transmigration into France, his pendulums and his progress in dioptrics, etc." Finally, it may be relevant that a copy of the *Oscillatorium Horologium* was found in his library (*Inventory* p. 130; Freudenthal, no. 16).

¹⁸ *Int. Emend.*; II, 9.

¹⁹ *Int. Emend.*; II, 13, note i.

to be significant and attain to certainty, it must be formed about this principle. Clear and distinct perceptions share in the surety and stability of eternal and essential natures, since they have a metaphysical foundation; but all experience and experimentation is involved in the changes and vicissitudes of bodies. ". . . One clear and distinct perception or several together can be the cause absolutely of another clear and distinct perception. In fact all the clear and distinct perceptions which we form can arise only from other clear and distinct perceptions which are in us nor can they acknowledge any cause exterior to us. Whence it follows that the clear and distinct perceptions which we form depend on our nature alone and on its certain and fixed laws, that is, on our absolute power, and not on fortune, that is, not on causes which although they act by certain and fixed laws are nevertheless unknown to us and alien to our nature and power. As regards other perceptions, I confess that they depend chiefly on fortune. From these things appears clearly what sort the true method ought to be and what it should consist in chiefly, namely, in the knowledge alone of the pure understanding and of its nature and laws, in order to acquire which it is necessary before all to distinguish between the understanding and the imagination, or between true ideas and other ideas, namely fictitious, false, doubtful, and absolutely all that depend on the memory alone." ²⁰

To make these necessary distinctions requires no preliminary investigation of the mind; so far as method is concerned, all the critical preparation that is needed can be accomplished by putting together a short history of the mind or of its perceptions. Such a history had been made by Bacon, but Bacon, despite it, had not come upon the true method since he shared the errors into which Descartes had fallen. Both had misconceived the first cause and origin of things, the nature of the human mind, and the true cause of error. And as the cartesian method fails because of these confusions, so too Bacon's errors concerning the mind lead him to a mistaken method. "Concerning Bacon I shall say very little, for he speaks very confusedly about this thing (the true cause of error) and he

²⁰ *Epistola* XXXVII (*olim*, 42); IV, 188-189.

proves almost nothing but simply narrates. For in the first place he supposes that the human understanding, besides the fallibility of the senses, errs from its nature alone, and that it fashions all according to the analogy of its own nature and not according to the analogy of the universe, so that it is like a mirror which is inconstant to the rays of things and which mixes its own nature with the nature of things, etc. In the second place, that the human understanding is prone to abstraction by its own nature and that it feigns things which are constant to be fluid, etc. In the third place, that the human understanding augments and can neither pause nor acquiesce. The other causes which he assigns can all be reduced to one of Descartes's, namely that the human will is free and broader than the intellect, or as Bacon puts it more confusedly,²¹ that the intellect is not of dry light but receives an infusion from the will."²²

Bacon's method and Descartes's method are wrong for the same reasons though their methods are widely different. Descartes had misconceived the nature of God and of his infinite attributes, and he could consequently take up the intelligible interrelations of things only by way of a causal derivation from God; no notion of the identity of the sequence of ideas and things would be possible by such an interpretation. He was nevertheless aware that the soul must begin with clear ideas and proceed deductively among clear ideas; his error was to imagine that God was the transient cause and not the immanent cause of things; he realized that things are intelligible in that they flow from God, but he seemed unaware that they would then express an eternal essence. Bacon erred in another direction; he was not, like Descartes, a rationalist but imagined that the elements of knowledge come from the ordering of experience, that error therefore is an imperfect reflection of something outside the mind, and that the very nature of the understanding committed it to falsification, since it must express a changing reality in constant terms. Spinoza's method was to be neither of these. What it was to be is sufficiently evident from the repeated and careful statement, not only of his method itself, but of his attitude

²¹ *Vide Verulamii Novum Organum lib. I, Aphorismo 49.*

²² *Epistola II; IV, 8-9.*

toward experimental science. It is unmistakable from his insistence alone that no reliable information could come to us from experience.

The place and relative importance of experimentation and of reason are stated most emphatically in Spinoza's correspondence with Oldenburg concerning Boyle's treatises *on Salt-Petre* and *on the History of Fluidity and Firmness*. Boyle's intentions appear clearly in these works; in fact they were published under the joint title *Some Specimens of an attempt to make Chymical experiments useful to illustrate the notions of the Corpuscular Philosophy*. They involve, as the preface avows, a plea for experimental study, addressed to philosophers who "are troubled when they see a man, acquainted with other learning, countenance by his example sooty empirics, and a study, which they scarce think fit for any but such as are unfit for the rational and useful parts of physiology."²³ It is a project to which Spinoza might be expected to attribute minor philosophic importance, and in fact the politic and assiduous Oldenburg, when he received Spinoza's long critical reply²⁴ to his request for criticism of the work felt that he must have omitted to send some bit of explanation with the book. Thanking Spinoza for his kindness²⁵ he had to insist "meanwhile I want you to be advised that he [Boyle] set out not so much to show that this was a truly philosophic and perfect analysis of Nitre, but to point out that the popular doctrine and the one accepted by the schools concerning substantial forms and qualities rests on so little and that what they call the specific differences of things could be reduced to the magnitude, motion, rest, and situation of parts. Having noted which, the author says further that his experiment on nitre shows sufficiently and more than sufficiently that the whole body of Nitre was translated by Chemical analysis into parts differing from each other and from the whole, and that later they coalesced again and were reintegrated so that very little of the original weight was lost." In reply Spinoza thanks him for the transmission of Boyle's answer

²³ *The Works of the Honourable Robert Boyle* (London 1772); vol. I, p. 354.

²⁴ *Epistola* VI; IV, 15 f.

²⁵ *Epistola* XI (*olim* 8); IV, 48.

and the restatement of his purpose, although the reply had been made only by the way and as if the questions which were raised were somewhat different (*quamvis obiter, et quasi aliud agendo*), but, he remarks a little dryly, these observations of his are not of such weight that the Learned Gentleman should expend on them time which might be used in more lofty speculations. "But I did not think," he goes on ²⁶ "rather I could not have persuaded myself that the Learned Gentleman had no other end in his Treatise on Nitre than only to demonstrate that puerile and trivial doctrine that substantial forms, qualities etc. rest on so little; but since I had persuaded myself that the Honorable Gentleman wished to explain to us the nature of Nitre, that namely it was a heterogeneous body made up of fixed and volatile parts, I wanted in my explanation to show (which I think I showed sufficiently and more than sufficiently) that we can explain all the phenomena of Nitre, at least, all that I know, even if we do not concede that Nitre is a heterogeneous body but a homogeneous one." This is wholly a question of whether experience can determine the ultimate constitution of things. That Spinoza jeers at Boyle's attempts to dispose of substantial forms, does not mean that he wishes to defend them, but rather he was convinced that reason had disposed of them long before. It was, in fact, the ancient atomists, Epicurus, Democritus, and Lucretius who showed the futility of "occult qualities, intentional species, substantial forms and a thousand other vain trifles." ²⁷ But for proof or disproof of them, for any valid consideration of such problems, it is reason and not the imagination which must be invoked.

The opposition between the experimentalist attitude and this rationalism is stated sharply each time Spinoza finds it necessary to consider the methods of experimentation. In an age which glorified itself for having discovered the importance of observation and which had worked itself rapidly to the belief that all the secrets of nature might be forced out by manipulation of things, Spinoza held strictly to the requirements of rational speculation. His confidence in the mathematical method is only a symptom

²⁶ *Epistola* XIII (*olim* 9); IV, 64.

²⁷ *Epistola* LXI (*olim* 60); IV, 261.

of his attitude: that all truths are so related to each other that they may be derived from a few postulates; that the method to discover the nature of things is to proceed carefully and on adequate warrant of inference from clear and simple ideas to others implied in them; and that the ways in which things affect the senses can reveal nothing of their nature. His attitude in the discussion of Boyle's experiments is dictated by this reliance on reason. Does experimentation convince the scientist that a chemical substance is made up of parts which possess different characteristics? Spinoza asks immediately what advantage is derived from that explanation; the opposed postulate that the parts are homogeneous would serve as well. His mathematical training alone would have suggested the query: to explain a thing should raise the question of its nature, not of the history of its construction or of its effect on the senses — a parabola is described as a conic section no matter how it may happen to have been constructed or how it may appear to the inspector. Simply by following the mathematical method he would have been decided to abandon the attempt to discover the causes which led to the actual production of any particular thing; such causes might explain the accidental presence of the thing and its existence, but they would not touch on its nature or essence. The interest of mathematics is to discover the cause which will explain the essence of the thing however it may have been produced. Parabolas are treated as conic sections, not because all parabolas are constructed from truncated cones — clearly they are not — but because such treatment leads more easily than other descriptions to the discovery of the essential characteristics of parabolas. So in the sciences, a good explanation need not follow an experimental illustration; it may represent nothing of the actual antecedent causes of a phenomenon; it may be frankly impossible to reproduce; but if all the relevant qualities of the thing can be deduced from it, it is a good explanation. The phenomenon is not defined by the accidents of its occurrence; there are in fact innumerable hypotheses which could explain any phenomenon correctly (since explanation is nothing more than a way to account for the essence of a thing in any imaginable circumstances) so long as the

explanation appeal to fundamental laws, such as, in the case of extension, those of motion and rest.

The difference between Boyle and Spinoza is, then, this very profound methodological disagreement. Not only, however, is the approach of Boyle different from Spinoza's, and not only is the appeal to experimentation as final verification the sign to Spinoza of jumbled thinking and of insufficient consideration of metaphysical foundations, but the solution which is finally reached by experimentation is in most cases, as in this, needlessly complicated, and consequently experimentation alone leads almost inevitably to bad hypotheses. These differences between the two appear first in the problems involved in the redintegration of nitre from spirit of nitre. Boyle had insisted that the spirit of nitre was not of the same nature as nitre, since it would not crystallize nor could it be reduced to solidity or consistency, that is, it could not be changed to nitre without the presence of a lixivate salt; consequently he looks on nitre and spirit of nitre as two separate substances. Spinoza insists there is nothing in these circumstances to confirm the conclusion. "In order that this be clear," he goes on, "I shall set forth briefly what suggests itself most simply for the explanation of this redintegration of Nitre; and at the same time I shall adjoin two or three extremely simple experiments, by which this explanation is in a certain measure (*aliquo modo*) confirmed. To explain this phenomenon as simply as possible I suppose no other difference to exist between the spirit of nitre and nitre itself than this one, which is manifest enough, namely, that the particles of the latter are at rest, while those of the former are moved by no little agitation, one against the other."²⁸ The difference between nitre and spirit of nitre is then only in the motion of their particles, and the redintegration of nitre is explained by the consistency of the particles of spirit of nitre, which are brought to rest through the agency of a fixed salt; this salt is used only as an instrument to that end. The same explanation by the movement of component particles will serve to explain other differences, such as the difference in taste of the two

²⁸ *Epistola* VI to Oldenburg; IV, 17.

and the fact that nitre is inflammable and spirit of nitre is not.

The point to be established is a very simple one and consequently the experiments are, as Spinoza observed, very simple. First he undertook to prove that the particles which go forth in the smoke when nitre is detonated are pure nitre. He heated nitre in a crucible, detonated it, and caught the fumes in a glass, dampened them by breathing on them, then left the glass to dry. Crystals of nitre appeared. But lest it be suspected that these were not formed from the volatile particles, but were instead particles of undecomposed nitre expelled by the explosion, he fashioned a long tube and conducted the fumes from the experiment to a mirror. To it, he said, "a certain matter adhered, which when exposed to air liquefied and, although I waited several days, I was able to observe no effect of Nitre; but after I poured Spirit of Nitre on it, it was changed to Nitre."²⁹ This appears, to the sensibilities of the experimentalist, a rather cavalier fashion of distorting experiments to one's preconceived purpose.³⁰ Yet Spinoza considered that this experiment, like the two which are to follow, is sufficient to prove his point (and it would be rather difficult to imagine what an experimental disproof of it would be) that the whole phenomenon can be explained in terms of fixed and volatile parts of a body operating in accordance with the laws of motion; moreover, he contends parenthetically, it is senseless to try to show that this explanation is faulty; but Boyle's explanation, based on a radical distinction of nitre and its spirit into two wholly different bodies, is needlessly complicated and so, a bad explanation. Spinoza suggests one interpretation of his experiment: "From this I seemed able to conclude, first, that the fixed parts were separated in liquefying from the volatile parts and that the flame forced them, after they had been dissociated from each other, together again. Second, that after the fixed parts are dissociated from the volatile by detonation, they can

²⁹ *Epistola VI* to Oldenburg; IV, 22.

³⁰ Cf. for example the righteous indignation of Couchoud, *Benoît de Spinoza*, p. 81 ff.

not be united again: from which it is concluded, thirdly that the parts which adhered to the vessel and coalesced into crystals were not fixed but volatile.”⁸¹ The other two experiments are conceived to the same end. The second seems to show that the fixed parts are only the *faeces* of nitre and that the more nitre is freed of *faeces* the more volatile it becomes and the more apt to crystallize. To show this, he very simply dissolved filtered nitre in cold water and as the water evaporated, crystals of nitre were found on the sides of the glass. The third experiment attempted to explain why nitre is inflammable and the spirit of nitre is not; the particles of the spirit of nitre are in motion; when they lose their motion they become inflammable again. This he illustrates by mixing sand and spirit of nitre, drying them and putting a glowing coal to them. They took fire and sparkled in the same fashion as nitre would have if it had been present.

It can not be insisted too much that these experiments are not carried on in ignorance of the proper controls of scientific experimentation, but that rather they are dictated by a profound theory of what is involved as a postulate in all experimentation. The contrast of the attitude Spinoza assumed and the customary dogmas of experimentalism could not be brought out more clearly than they are in his discussion with Boyle. Boyle is concerned everywhere with the advance of the experimental method and he undertakes in several sections of his treatise to demonstrate that the tangible and other qualities of nitre and spirit of nitre, such as heat, sound, color, taste, and others, depend on the motion, figure, and mechanical modifications of their particles. To demonstrate each of his contentions he advances a carefully devised experiment, and clearly it is this precise experimental illustration which is the chief end he sought. Spinoza looks upon them otherwise; “since they are not advanced by the Honorable Gentleman as mathematical, there is no need to examine whether they are directly conclusive. But meanwhile I do not understand why the Honorable Gentleman should try so solicitously to collect this from his experiment, since it was demonstrated sufficiently and more than sufficiently first by

⁸¹ *Epistola* VI; IV, 22-23.

Bacon and then by Descartes.”³² The point is not that Bacon or Descartes had experimented with nitre, but if it is a question of demonstrating that sensible qualities are the result of motions of parts, there is no need to observe the heat and agitation which result from mixing lime and water; rub two pieces of wood together and you have heat; or if it is a question of producing sound, boil water; and so for all sensible qualities. Boyle believed that the experimentalist should proceed in laborious exploration of the whole realm of nature; Spinoza insisted that experimentation could discover only examples of the workings of universal laws; those laws and their implications must be followed out mathematically and consequently any experiment was practically as good as any other. “And so,” he said, “was I to judge (if a philosophic freedom may be used) all these things to be superfluous (*supervacanea*)? I say this lest others who love the Honorable Gentleman less than they should, judge falsely concerning him.”³³ Spinoza’s inquietudes on this score take a strangely ironical note from the subsequent history of thought.

II

THE differences which have appeared in this controversy are not accidental, nor are they limited to or dictated by only a controversy over nitre. Ultimately there are involved theories of knowledge, and the point of difference centers on the place of experimentation. Boyle opens his *History of Fluidity and Firmness* in the vein of such reflections: “Whether philosophers might not have done better in making fluidity and firmness rather states than qualities of bodies, we will not now examine. But under whichever of the two notions we look upon them, it is manifest enough that they are to be reckoned amongst the most general affections of the conventions or associations of several particles of matter into bodies of any certain denomination, there being scarce any distinct portion of matter in the world, that is not either fluid, or else stable or

³² *Epistola* VI to Oldenburg; IV, 25.

³³ *Epistola* VI; IV, 26.

consistent.”³⁴ Spinoza would, of course, question whether it is manifest enough that they are to be numbered thus. “Notions,” he said, “made for popular use, or which explain nature not as it is in itself but as it refers to human senses, I judge should in no fashion be numbered among the *summa genera* nor should they be mixed (lest I say confounded) with pure notions and notions which explain nature as it is in itself. Motion, rest and their laws are of this latter variety; visible, invisible, hot, cold and, to say it forthwith, fluid, solid and others are of the former.”³⁵ When Boyle remarks,³⁶ “It would scarcely be believed, how much the smallness of parts may facilitate their being easily put in motion, and kept in it, if we were not able to confirm it by chymical experiments,” Spinoza must express himself definitely on this ignorance of the limitations of experimentation. “Never,” he said, “could any one prove that by chemical nor by any other experiments, but only by demonstration and computation. We divide bodies *in infinitum* by reason and by calculation, and consequently we also divide the powers that are needed to move them; but we could never prove it by experimentation.”³⁷

It is not surprising then that Spinoza should protest constantly in the course of Boyle’s demonstrations that his experiment is either unnecessary or insufficient to demonstrate his contention. Many of the experimental conclusions could be known by more simple processes: there experimentation is unnecessary; others go contrary to essential truths known rationally and adequately: experimentation is insufficient to overthrow or even touch them. Thus Boyle experiments with the action of *aqua fortis* on silver to demonstrate the action of insensible parts which are themselves seldom visible to us. That action could be known sufficiently, Spinoza thinks, by observing the behavior of one’s breath on a cold day. Experimentation will give you no new truths about the nature of things; but if it will limit itself to compiling the histories of things

³⁴ *The Works of the Honourable Robert Boyle*, vol. I, p. 378.

³⁵ *Epistola VI*; IV, 28. Cf. *Prin. Phil. Pars II*, 1; I, 186. “*Quamvis durities, pondus, et reliquæ sensiles qualitates a corpore aliquo separentur, integra remanebit nihilominus natura corporis.*”

³⁶ *The Works of the Honourable Robert Boyle*, vol. I, p. 380.

³⁷ *Epistola VI*; IV, 29.

it may be extremely useful. So, in the question which interests Boyle, that of fluids, the explanation rests on very simple grounds. "Finally, to bring this up incidentally, it suffices for the understanding of fluid *in genere*, to know that we can move our hand with a motion proportionate to the fluid in all directions with no resistance, as is manifest enough to those who attend sufficiently to those notions which explain nature as it is in itself and not as it is related to the human senses. However I would not despise this history as useless, but on the contrary if it were carried out for each liquor as accurately and with as much good faith as possible, I should deem it extremely useful for the understanding of their peculiar differences, a thing very greatly to be desired by all philosophers as most necessary."³⁸

Briefly and definitely then, adequate knowledge does not come from experience; experimentation can not in the nature of things lead to a knowledge of what things are. Only by reason can truth be reached, and reason derives its true ideas not from memories or experiences but only from other true ideas. Experimentation can decide nothing concerning the truth or falsity of an idea, for that depends on a demonstration of which only the mathematical statement is adequate; an appeal to experience is irrelevant to any mathematical consideration. Experience deals with events, not with ideas, and it is relevant to reason only in that it can indicate whether things actually exist in one relation rather than another. Experimentation, in other words, can tell what reasoning is relevant to a situation, but it can not be an arbiter of truth. It can indicate what relations need not be thought about, because they are irrelevant, but the actual processes of scientific thought ignore experience: no true ideas come to us from without. So long then as science is concerned with the external and accidental relations of things it will reach no certainties: we have only inadequate ideas of particular bodies and particular souls, whether they be our own or others. Yet accurate science is possible, because science is concerned, not with existences, but with essences or at least with general notions. It is possible to know what a thing must be;

³⁸ *Epistola* VI; IV, 33-34.

to know what it is, is a rare achievement and does not fall in the domain of science.

Experience is equally irrelevant to knowledge of chemical substances and of God. De Vries once asked Spinoza if experience is needed in order to know whether the definition of any attribute is true or not, and Spinoza's answer was categorical. "We never need experience, except for those things which can not be concluded from the definition of a thing, as for example, the existence of modes: that can not be concluded from the definition of a thing. Certainly not for those things the existence of which is not distinguished from their essence and is concluded consequently from their definition. Indeed no experience could ever teach us that: for experience teaches us the essence of no things; but the most which it can effect is to determine our mind to think only concerning certain essences of things. Wherefore since the existence of attributes does not differ from their essence, we will be able to reach it by no experience."³⁹

It is not to be expected however that an avowed empiricist would fall in with a view that experimentation is merely a way by which thought fixes upon one among many conceivable and possible entities. Boyle protests through the omnipresent Oldenburg against the obvious violations of the canons of experimentation which Spinoza committed. Spinoza's theory is essentially that the fixed salt of nitre is only the *fæces* of spirit of nitre and that the differences of their behavior can be explained not by an essential difference between the two, but by the fact that the spirit of nitre is relatively pure of *fæces* and is a more subtle matter, since its particles move more rapidly; the *fæces* have motions hollowed out to the measure of the particles of nitre. This supposes a subtle matter in which a more gross matter is lodged, and whereas Boyle objected to all the suppositions which Spinoza set up, this one seemed to him particularly obnoxious; it was assumed, he said, simply from the hypothesis of the impossibility of a vacuum rather than proved necessarily from any phenomena. Such a fault is inexcusable in the eyes of Boyle since his concern is almost wholly with illustrating and utiliz-

³⁹ *Epistola X* (*olim* 28) to de Vries; IV, 47.

ing the experimental method. He is, as Oldenburg expresses it for him, of the number of those who are not so confident of their reason that they do not want phenomena to agree with reason. Experimentation, he is sure, will lay bare the laws of nature. He protests consequently against any tendency to identify nitre and the spirit of nitre since he must insist that they differ in chemical and physical properties. He contends that each of Spinoza's experiments was conducted under improper conditions, so that in the first, the crystals of nitre are to be explained by the particles of nitre which escaped in the detonation, in the second by causes which have nothing to do with the question, and in the third the sparkling is to be accounted for by the solid, rigid particles of the salt.⁴⁰

The precise issues of the opposition are then stated definitely and clearly. Spinoza has insisted that Boyle's experiments are unnecessary; Boyle has protested that Spinoza's reasonings are hypothetical and irrelevant. Boyle is outraged most of all that Spinoza should suggest the substitution of simple experiments for his nicely articulated ones. There is, he points out through Oldenburg, a great difference between experiments in which every element that enters is definitely known and the obvious experiments in which what Nature contributes and what slips in unchecked and unobserved are not distinguished. Thus, wood is a much more composite body than the subject Boyle treated, and the burning of wood to produce heat is a complex phenomenon; Spinoza commits the same error there as when he suggests the boiling of common water, for fire is added externally, whereas in the procreation of sound, with which Boyle worked, the agitation and movement is caused by nothing external. But Spinoza retorts to this that Boyle has misconceived his contention: he had protested against the presumption of this experimentation. Bacon and Descartes too were men who wanted phenomena to agree with their reasons, but possibly, since the Illustrious Gentleman did not find his theories stated and treated clearly in the works of others before him, he has something, which Spinoza confesses himself unable to find, that refutes their work. This Spinoza is willing to sup-

⁴⁰ *Epistola XI (olim 8)* from Oldenburg; IV, 49 ff.

pose, since all men may err, but as to the great difference between the obvious and the dubious experiments he had used, he confesses that he does not see that the Illustrious Gentleman has explained the nature of the things used, namely the calx of nitre and the spirit of nitre, so that they seem less obscure than the things he used, namely common calx (lime) and water. As to the wood, he concedes that its nature is more composite, but he asks what difference that makes, since in either case we are ignorant both of the nature of the things involved and of the mode in which heat arises. So, definitely through this discussion, it continues to be a question of what contribution experience can make.

So far as experiments are concerned Spinoza insists that the hypotheses that nitre is made up of heterogeneous and that it is made up of homogeneous parts, are equally well-founded, and on experimental grounds there can be no choosing between them. Since Boyle had said that experimentation favored peculiarly the explanation of nitre and spirit of nitre as two distinct substances, explicable by their physical and chemical behavior, Spinoza had proposed to try whether that behavior could not be explained as well by the opposed supposition that they are fundamentally the same substances. In fact, he said, "concerning this, it was not my purpose to show that the fixed salt is the *faces* of Nitre but only to suppose it, that I might see in what manner the Illustrious Gentleman could show me that the salt is not the *faces* but rather that it is necessary to constitute the essence of Nitre and that without it, it can not be conceived; because, I say, I thought that the Illustrious Gentleman wanted to show that."⁴¹ Spinoza has at most a skeptical reaction to the attempt to show by chemical manipulation that nitre is a heterogeneous body made up of fixed and volatile parts. So he fits all of Boyle's objections into his explanation. He protests that his hypothesis is perfectly adapted to explain the redintegration of nitre, for the fixed salt of nitre (of the *faces*) has motions hollowed out to the measure of the particles of nitre; when Boyle points out that experimentally other salts can effect that redintegration, Spinoza replies

⁴¹ *Epistola XIII (olim 9) to Oldenburg; IV, 65.*

that then, obviously, they have motions approximating those of the fixed salt of nitre. Consistently, in other words, Spinoza is reiterating that as explanations, hypotheses can have only rational foundations, and substantiation or criticism of them must be derived from reason. In a profound metaphysical sense, scientific hypotheses have only an accidental relation to experience. Consequently he is very much surprised that Boyle should have sought to invalidate his hypothesis at this point by showing that it is not founded on phenomena in the empirical fashion, but rather that it follows from an assumed impossibility of a vacuum. "In the next place," he says, "what I said concerning the particles of nitre in greater motion surrounded by more subtle matter, this, as the Honorable Gentleman notes, I concluded from the impossibility of a vacuum; but I do not know why he calls the impossibility of a vacuum an hypothesis, since it follows clearly from this, that Nothing has no properties. And I wonder that the Illustrious Gentleman should doubt this, since it seems to be established that there are no real accidents present (in a vacuum): I ask whether a real accident would not be present if there were quantity without substance?"⁴²

The three experiments then which Spinoza used to confirm his explanation were not, since they could not be, absolute confirmation of it. "Indeed, as I said expressly, I did not bring forward these experiments that I might confirm by them that which I said; but only because these experiments seemed to confirm in a certain manner (*aliquo modo*) that which I said and that which I showed to agree with reason."⁴³ The important thing, of course, was that the explanation was founded on good reason, and that it was derived only from the implications that follow from clear and distinct ideas. Experience can never furnish a true idea; experience can not wholly fall within a true idea nor wholly contradict it; but it may be analyzed to illustrate a clear and distinct idea. If Oldenburg interprets Boyle's ambitions correctly however, sections of the treatise on nitre were written "to demonstrate and insist on the use of Chemistry for establishing the mechanical

⁴² *Epistola XIII (olim 9)*; IV, 65. Cf. *Princ. Phil. Pars II*, 3; I, 188.

⁴³ *Epistola XIII (olim 9)*; IV, 66.

principles of Philosophy"; it was this which Oldenburg had insisted that Boyle had not been able to find stated or treated clearly in any work.⁴⁴ That Spinoza had invoked the names of Bacon and Descartes was not a defense of former experimentation, but a reflection on experiments: this experiment, like all others, will reveal nothing of the mechanical principles of philosophy, but if the mechanical principles are known, then this is a good experiment to investigate the nature of nitre. "I say that I confess freely that this redintegration of Nitre is a fine experiment for the investigation of the very nature of Nitre, when, of course, we first know the mechanical principles of Philosophy and when we know that all variations of bodies are made according to the laws of mechanics; but I deny that they follow more clearly and obviously from the aforesaid experiments than from many other obvious experiments from which they are not demonstrated."⁴⁵

One might return then to the distinction which Boyle made between experiments which are conducted under proper controls so that all the elements that enter are known, and other common experiments. Spinoza doubts whether that distinction can ever be sharp enough to make much difference philosophically. "Finally," he says, "I do not know on what grounds the Illustrious Gentleman dares to affirm that he knows what Nature contributes in this matter concerning which we are speaking. On what reason can he show us that this heat has not arisen from some extremely subtle matter? Possibly because little of the original weight was lost? Even if none had been lost, nothing could be concluded in my judgment: we see, in fact, how easily things can be imbued with some color from only a small quantity of matter and so, as far as the senses are concerned, are made neither heavier nor lighter. Wherefore I can doubt, not without reason, whether perchance certain things do not concur which could be observed by no sense; certainly so long as it is not known how all those variations which the Illustrious Gentleman observed in experimenting, could be performed by the aforesaid bodies, by all means I hold it for certain that

⁴⁴ *Epistola* XI (*olim* 8); IV, 50.

⁴⁵ *Epistola* XIII (*olim* 9); IV, 67.

the heat and that effervescence of which the Illustrious Gentleman speaks have arisen from an adventitious matter." ⁴⁶ The particular problem to which Boyle had attempted to give experimental demonstration requires no principles other than those which Spinoza uses constantly to explain fluid bodies; the experimentation has only shown this problem to be one of those that fall in this well-known explanation. "For I am compelled by the experiments thus far to recognize no other difference between the spirit of nitre and nitre than that the particles of the latter are at rest while those of the former are in a state of great mutual agitation: so that there is the same difference between Nitre and its spirit as there is between ice and water." ⁴⁷

Such a statement must appear to Boyle, as to Oldenburg, a distinct misconception of the investigation. Oldenburg consequently undertakes in his reply, first to restate definitely the originality of Boyle's methods, and then to show that there is no genuine disagreement between him and Spinoza. Both of these well-meaning attempts go back to that reiterated emphasis on the experimental method. Boyle, Oldenburg writes, "asks that you consult the preface to his experiment on nitre that you may understand from that the true scope which he set for himself in that work; that is, to show that the principles of the more solid resurgent philosophy are illustrated by clear experiments and that they can best be explained without the forms, the qualities, and futile elements of the schools; but in nowise did he undertake to teach the nature of nitre or to reject those things which can be concluded concerning the matter, homogeneity and differences of body from motion and figure etc., so far as they proceed from any of these. He says that he wished to introduce various textures of bodies and various differences between them to the extent only that diverse effects follow from them; and with reason therefore, so long as no resolution to primary matter has been made, some heterogeneity is concluded by philosophers and others." ⁴⁸ For the rest of the letter Oldenburg is concerned with exhortations that Spinoza coöperate with

⁴⁶ *Epistola XIII (olim 9)*; IV, 67-68.

⁴⁷ *Epistola XIII (olim 9)*; IV, 68-69.

⁴⁸ *Epistola XVI (olim 11)*; IV, 74.

Boyle, with reiterations that at bottom they are saying the same thing, with remarks that Boyle had anticipated and could not admit such reasonings as were adduced about vacua, and with insistent demands for precise illustration — an example of odorless bodies combining to form a body with an odor; if nitre and its spirit are related as water and ice how account for their discrepant qualities? Whether Spinoza tried to restate his position more clearly in the face of these repeated simplifications we are unable to say. The correspondence seems to have been interrupted by the war between England and Holland which extended from 1664–1667. In *Epistola* XXV written in April 1665 Oldenburg seems to be taking up the thread of correspondence after an interruption of nearly two years. But neither that letter nor Spinoza's reply to it resumes the debate again. Yet it is highly probable that Spinoza had more to say, since *Epistola* XXIX of Oldenburg refers to Spinoza's letter of the fourth of September; that letter seems at last to have convinced Oldenburg that Spinoza did not share his opinion. Oldenburg writes now to tell Spinoza that he has convinced not only him but also "our noble Boyle" who sends his particular thanks. But though this discussion of the experimental method is the only important one (save the problem of the dutch translation of Boyle's treatises into latin) which Oldenburg and Boyle shared, it is impossible to judge what it was Spinoza convinced them of, since the body of Boyle's work in experimental science stands as convincing evidence that the precise bearing of this rationalist argument certainly escaped him. Moreover Spinoza figures in Oldenburg's letter to Boyle somewhat differently than one would expect from his letters to Spinoza. He is mentioned only once as "a certain odd philosopher whom you know, it being Signior Spinoza" who expresses his great respect and presents his most humble services.⁴⁹ It is probable that to Boyle's mind he continued to figure as odd and particularly odd in the strange criticisms he brought forward to the proceedings of experimentation.

The criticism of the experimental method follows point by point from the postulates of the spinozistic system.

⁴⁹ *The Works of the Honourable Robert Boyle* (London, 1772), vol. VI, p. 200.

Knowledge derived by the senses is imagination and can by no process be metamorphosed into knowledge of substance which is reached by the intellect alone. The nature of things may be conceived through either of two instrumentalities, the intellect or the imagination; experimental knowledge is by nature imaginative and like all imagination, though useful, doomed to be inaccurate. All considerations that the mind can enter on may be divided between these two. So, "there are two ways in which quantity may be conceived by us; abstractly or superficially as we have it by way of the senses in the imagination, or as a substance, as it is known by the intellect alone."⁵⁰ Quantity is separable, divisible, finite, only by imagination; and consequently it is subject to measurement, an indispensable device of experimentalism, only when it is conceived as abstracted from substance. So too duration can be determined only when separated from the manner in which it flows from eternal things. Finally number arises when the affections of substance are separated from substance itself and are reduced to classes that we may imagine them easily, so far as that is possible. The favorite categories of the scientist, number, time, and measure, are therefore nothing more than modes of thinking or rather modes of imagining. All the antinomies of reason arise from confusing these categories with other notions which could never arise from the imagination but only from the intellect. The modes of substance (and these are the subject matter of science) can never be understood if they are confused with beings of reason or aids to the imagination such as time, measure and number.⁵¹ The passing of an hour can not be explained if duration is conceived abstractly and confounded with time, for to try to build duration out of moments is the same as to try to build number out of zeros. The nature of things can not be seized adequately by instruments that measure or count.

This position is not so much a condemnation of experimentation as a limiting of its possible utility; it can serve to show that there are things or phenomena of a certain sort but it is inadequate to show what they are. On the

⁵⁰ *Epistola XII (olim 29)* to Meyer; IV, 56.

⁵¹ Cf. *Epistola XII (olim 29)*; IV, 57-58.

other hand it is not to be supposed that particular things are known by a direct deduction from substance. Tschirnhaus was very much concerned that Spinoza demonstrate the existence of bodies *a priori* from the concept of extension,⁵² but Spinoza replies that that is impossible.⁵³ Moreover, whereas a purely factual account would give nothing of the nature of a thing, a purely metaphysical consideration, if it were possible, would yield only the most general characteristics—motion in extension, understanding in the intellect. One aspect of this worried Tschirnhaus a great deal,⁵⁴ since it made it difficult to know what distinction there is between a true and an adequate idea. If he examines the cause of a given idea, he is led to another, and the cause of that is still another concept, and so on until he is led to a cause for which he can find no further cause than that among all the possible ideas which he had within him, this one alone existed. It is not far to seek the practical methodological aspect of the problem: since many things, each expressed in infinite modes, may be known by adequate ideas, and yet no other justification for the ideas is possible than to trace them to other ideas, until, in each case, an ultimate idea on which this reasoning depends is reached, how may one be sure that the sequence of thinking represents truly the nature of things?

The part of this problem which is not metaphysical, the application of ideas to situations, Spinoza would assign to the sciences. No hypothesis can be erroneous once the fundamental laws of mechanics are set down, but some can be more valuable than others, since more properties can be deduced from them and the process of deduction can be less laborious. "I assert absolutely, that from certain properties of anything (whatsoever idea be given) some things may be discovered more easily, others with more difficulty (all of which things regard the nature of the thing); I think it must only be observed that an idea of such a nature must be sought that from it all properties can be inferred."⁵⁵ The obvious aim of science is to find such ideas that all the properties of the object may be deduced from

⁵² *Epistolæ* LXXX and LXXXII (*olim* 69 and 71); IV, 331-333.

⁵³ *Epistola* LXXXIII (*olim* 72) to Tschirnhaus; IV, 334.

⁵⁴ *Epistola* LIX (*olim* 63) from Tschirnhaus; IV, 269.

⁵⁵ *Epistola* LX (*olim* 64) to Tschirnhaus; IV, 271.

them with as little difficulty as possible. And from that obvious aim is derived again the obvious fitness of the mathematical method for the investigation of the nature of things. Very little reflection is required to realize what would be expressed by such ideas in the spinozistic system, that is, in a world which is derived from an infinite substance by the meditation of infinite *naturæ naturatæ*: all the properties of a thing can be deduced from a definition of it by its efficient cause. This is true equally of circles and of God, and God enjoys in explanation only one superiority over other things, that for him the efficient cause is internal rather than external, since he is cause of himself.⁵⁶

This much of methodology, as in fact all methodological considerations, is determined by the nature of things. If a single fallacy were to be pointed out in the experimental method, it is the primary assumption that Nature is such that a conception of its parts may be constructed by examining them in their operations and relations to each other. It is an important distinction that Spinoza considered Nature as a whole, that he did not think that it is determined by its parts, but rather that Nature determines the parts. By his conception any true idea carries implications concerning the whole, and for it to be true means that it is known in some relation to the whole, since each part pertains to the nature of corporeal or of thinking substance and can not be or be conceived without it. An explanation which is constructed from the observation of a few phenomena rather than from the universal principles of things ignores the nature of explanation. In order to consider a body so far as it exists, modified in a certain manner, it must be considered as part of the whole universe, agreeing with the whole and still cohering somehow with the other parts. Viewed in this way the whole of nature is the fluid course of infinite parts which impinge upon each other and determine each other to exist and to operate in certain ways. The nature of each part accommodates itself and agrees with the nature of other parts with which it comes in contact, modifying itself (within the limits of its own nature) in a fashion which will go least contrary to its na-

⁵⁶ *Epistola LX, ibid.*

ture. In all the parts, that is in all the universe, the same relation of motion and rest is conserved. So far as the physical sciences are concerned, their explanations go back all to the principles of mechanics, to the laws of motion, for it is by motion and rest that all bodies are maintained in existence and are modified. This is at once the reason why and the manner how all bodies are parts of nature. It is significant for human behavior that mind is part of nature in a way which will be seen to be the same as that in which the body is part of nature.⁵⁷

It is superfluous to insist after such definite explanations, that Spinoza, far from standing in ignorance of the tenets of what we have come to call modern science, reiterated as clearly and as persistently as possible that it violated some of the primary requirements of good explanation, and that its error lay chiefly in that it neglected the rôle experience plays in thought. His objections, which he details so specifically in his letters, are implicit in his metaphysics and his ethics. They might consequently have been sensed even by those of his critics who had not read his letters. Nevertheless this nicely reasoned criticism of science has been passed over and buried; and the tragedy, further, is that even among his correspondents, Tschirnhaus seems to have been the only one to have grasped the full import of this attitude and to have asked pertinent questions concerning it. The dogma of the progress of science was evidently fixed so firmly at the very beginning of science that heresies about its apparent nature were submissively ignored. It was no easy task for the centuries since Spinoza to ignore these criticisms and yet raise his works to high philosophic esteem, for he stated again and again the exact nature of mathematical reasoning; he insisted that it was the one road by which reason might be led to truth certainly; he composed two important works on the well-examined bases of such insistences according to that method; and finally he entitled his one treatise on physical phenomena an *Algebraic Computation of the Rainbow*, added in the subtitle that it was for the *greater connection of physics and mathematics*, and lest that prove insufficient,

⁵⁷ Cf. *Epistola* XXXII (*olim* 15) to Oldenburg; IV, particularly 170 and 173.

affixed the quotation from Cicero to the title page:⁵⁸
“Among them geometry was in the highest honor, and so,
none were more illustrious than mathematicians. But we
have set the limit of that art to its utility for measuring and
calculating.”

⁵⁸ *Tusculanarum quæstionum lib. I in princ.*

PART TWO

THE SYSTEM OF SPINOZA'S THOUGHT

CHAPTER I

GOD AND THE UNIVERSE

NOWHERE is the unconscious irony of the criticism to which Spinoza's method has been subjected so incongruous as in the various treatments of his doctrine of God. It is precisely in the relation of God to the world that critics have found most of the paralogisms and antinomies that have been accredited to his philosophy. That God should appear at the very opening of the *Ethics* and as the basis of all metaphysical analysis, and that the flow of the universe from him should be demonstrated with the interposition only of his attributes and of infinite modes, seems first to place the foundation of the whole philosophy in an unexamined assumption and then to explain everything else by unsubstantiated principles that depend on it. There have been critics to insist that the existence of God is proved inadequately and that things are explained without cogency by God alone. Ultimately these two difficulties are only one. They are reduced readily to the peculiar transvaluation that a rationalism undergoes when it is submitted to only empirical requirements; in view of it the circumstances of the mathematical demonstrations are sufficient to give rise, not only to the suspicions advertised by the godly and ungodly in the alternating names of atheist and pantheist, but also to the accusation that the carefully grounded theorems of the *Ethics* are not proved! The mathematical mode of presentation and demonstration is so little to the philosophic taste of critics nurtured on a latter-day science and psychology, that the objections and paralogisms strike even at the method itself.¹

¹ Couchoud, for example, protests (*Benoît de Spinoza*, pp. 167-168) that the geometric form removes not only all literary value but also compromises the philosophic value of the work! This he thinks is largely because the propositions are presented in their nudity without explication; he seems to protest because Spinoza is satisfied if only the interdependence of the propositions is established; and finally after lamenting the insufficiency of examples and illustrations he makes

Yet the philosophy of Spinoza could have had no other beginning than God. It was not a mystic illumination but the exigencies of mathematical analysis which led Spinoza to put God at the head of his exposition. "Surely," he said, "everyone must concede that without God nothing can be or be conceived."² Paralogisms begin to appear if this is taken to be a statement of personal biography or of an actual psychological process or historical event. It is a statement rather that metaphysically the universe is ordered in God and that a knowledge of the universe is possible only as it involves God. The objections to the demonstrations of the existence of God, consequently, are made most often in the name of distinctly empirical predilections. If God is to be conceived in relation to the universe as its creator instead of as its formal principle and, in an indirect way, as the first of its efficient causes, then this presentation is scarcely admissible. The idea of God and of substance is not presented as a necessary growth out of experience, but is drawn indirectly from the postulates and definitions of the system. It is amazing, even if the empirical tendency of the objections be borne in mind, that a mathematical demonstration of God should have excited so frequently the protest that God is not demonstrated but that substance is defined and that what purports to be a demonstration of God is nothing other than an unwarranted substitution of God for substance. The criticism seems to be that God is drawn from the definition of substance and is assumed rather than proved. But the suspicion is the outward mark of bewilderment at what the metaphysician is to do, and of a misconception of how the mathematician should proceed and what he can accomplish. Spinoza had anticipated that it would be difficult to "see things through their first causes" but he insisted that the attempt must be made since nothing could be known positively from the "things that flow from external causes." Philosophy after him has grown unashamed and has even taken pride in its insistence that it be shown some basis in

this final statement of his antipathy for mathematical demonstration: "On dirait que l'auteur est plus préoccupé de prouver son système que de le faire comprendre." (p. 172).

² *Eth.* II, 19, sch.; II, 93.

experience for whatever it erects into a doctrine. But experience would have seemed to Spinoza the most questionable foundation for a philosophy. Experience is the realm of the imagination, and imagination is determined not only by the nature of things that are examined but by the constitution of the body or the mind. Spinoza was convinced that a demonstration should not begin with a vestige or an image left in the mind by some experience, but should have as its beginning some clear certainty. To start a mathematical exposition of philosophy with truths drawn from objects of sense would imply that they are known most certainly and that they are prior to all things; if the divine nature were to be deduced then as a consequence from such things, it would indicate that God is not only known least certainly but is last in the order of knowledge. Spinoza insisted frequently that such a course of thinking would be wholly a confusion of the "order of philosophizing." He looked on the pernicious errors that creep into philosophy as consequences of abandoning that order; from this source particularly come the error of imagining that God pertains to created things, the error of supposing that things can be created or conceived without God, and also the possibility of hesitating between two so absurd alternatives. The divine nature which is first as well in knowledge as in nature should be considered first in philosophy.³ Spinoza adopted this order of philosophizing and this mathematical method to avoid what would be called atheism and pantheism; the irony is that his precautions have earned him both titles and the suspicion besides of loose thinking.

Most of the errors against which Spinoza rails are the consequences of an empirical tendency to confuse the data of experience with philosophic method. That tendency is the source of the perversions he flayed in the Appendix of Book I of the *Ethics* — the ignorance of the nature of God which would permit so strange a conception as that every event is ordered to an end divinely and externally imposed; this conception he considered to be even more absurd than the notion which subjects all things to the indifferent will of God. Truth, he says ⁴ might have lain hidden from the

³ Cf. *Eth.* II, 10, sch.; II, 93.

⁴ *Eth.* I, Appen.; II, 79.

human race for all eternity had not mathematics which deals not with ends but with the essence and properties of figures shown another standard of truth to men. This conception of method uncovers the enterprise which is behind the demonstration of the *Ethics* and which is made explicit repeatedly in scholia and demonstrations, a determined effort to attain to truth and to see things through their first causes. But even when that enterprise is clearly seen and justified, when the criticism is directed against Spinoza's use of the mathematical method and not against the method itself, it is sometimes questioned if it could accomplish what he hoped of it. Mathematicians insist that a mathematical demonstration depends for its validity upon its postulates and those postulates must be assumed frankly with no demonstration of ontological validity.⁵ Spinoza, and perhaps his times, would seem, if the question is left in this form, to have neglected an important aspect of thinking and of method. Certainly if the criticism is accurate, the form of the *Ethics* is robbed of its pretension to peculiar accuracy, and if the cogency of its doctrines is not impaired by it, at least its aspiration to single and universal truth is denied. But the pretension of Spinoza's mathematical method can be deflated only by examining precisely what its pretension was; despite his confidence that such propositions of mathematics as that the angles of a triangle equal two right angles, involved absolute truth, his intentions in such beliefs and the grounds on which he held them deserve examination. There are statements spread all through his works which reform and define the problems related to his attitude toward method and truth.

The mathematical demonstration of the *Ethics* takes on the character peculiar to it from the fact that its subject matter is the whole of things and that the geometer who follows the demonstration is part of that whole. What would in one sense be the postulates of Spinoza's system are not stated as postulates but are deduced as theorems and

⁵ See for example C. J. Keyser, *Thinking about Thinking*, p. 29, "Why, then, did Spinoza fail? He failed because he endeavored to construct an ethical theory that was to have absolute and eternal validity, the kind of validity which he, like all other thinkers of the time ascribed to the geometry of Euclid but which, we know today, neither geometry nor any other doctrine, regarded as describing the actual world, can have."

are demonstrated in the system from the axioms and definitions that are stated. The particular course of the demonstration is governed by the circumstance that Spinoza conceives thinking to involve and depend on something ultimate beyond thinking, and if he had been concerned to trace thought to its foundation in thinking he might have stated one fundamental psychological postulate: if there is anything, even thought, then God must be and must be possessed of a nature at once inclusive and intelligible. Such a postulate, however, would have had the fault of being *a posteriori*, and it is involved, of course, in the statement of the definitions of substance, attribute and mode. Unfortunately the drawing of it from those *a priori* considerations usually impresses the reader only the more with a suspicion of deductions from such definitions. The existence of God, the relation of intellect to Thought follow easily from the definitions, since they are the first and most important consequences of the postulates. Obviously the system can not be deduced if the postulates are not granted. But Spinoza is so convinced of the necessity of these postulates that a denial of them seems to him a denial of the whole efficacy of reason. He does not hesitate therefore to dispose of those who will not grant them (in the excellent tradition which runs from St. Augustine's inquietudes concerning the fool of the Psalms who says in his heart there is no God, through Anselm to Descartes) as fools or machines.⁶ Anyone who doubts his own existence, that God exists or that he knows, is insane; in fact those various doubts are only one.

Spinoza's emphasis brings out in turn the logical and metaphysical aspects of the conviction. Logically it can be stated in a variety of ways: any discourse marks off a realm of discourse in such wise that any consistent statement indicates a real and intelligible nature. Or stated more rigorously: a postulate may be formulated such that from it and from the definitions involved in its statement a proposition may be deduced concerning the nature of the reality in which such a postulate is possible; the truth of that proposition would follow not from assent to the postulate but from the very existence of the postulate. For

⁶ Cf. *Int. Emen.*; II, 18.

thinking to be possible, it is said in effect, there must be an infinite perfect being. But to formulate such a postulate is an act of thought; it must according to its own statement be referred to a perfect intelligible being who is implicated in any statement. Yet knowledge of his nature will be independent of the truth or falsity of other statements; in fact, although the being of God is first indicated in these statements, once it is known such knowledge will not depend on the truth or falsity of the statements, but on the contrary their truth or falsity will depend on the nature of God. Even the primitive postulate is no longer postulated but is made apodictic by the better attested truth of God's existence.⁷ Moreover, the metaphysical aspects of this paradox seem to have engaged Spinoza at the same time as he worked upon its logical possibilities. If the nature of substance be examined it is seen that it can not be finite nor can it be produced from any other substance. It must, therefore, exist *formaliter*, since if it did not exist, it could never come into existence.⁸ But if substance did not exist, nothing could exist. Logically, then, all discourse indicates the definite truth, not of any statement in the discourse, but of the existence of the realm of discourse and of consequences implied concerning it; metaphysically, the existence of any being, however imperfect and transitory, involves the existence of a perfect, infinite, and eternal being. So that again, logically, contradictory statements concerning only the nature of God would involve absolute and self-evident falsity; metaphysically, only God has perfect being and is cause of himself.

A critical approach to Spinoza's philosophy, in the sense of examining first the nature of reason, would be impossible in the framework of the mathematical demonstration. The nature of reason depends on the nature of God and from his nature its characteristics must be drawn if they are to be understood. The natural beginning of things and

⁷ Cf. Spinoza's treatment of the cartesian doctrine of the veracity of God, *Prin. Phil. Pars I, Prolegomenon*; I, 147, and above pp. 104-105. Cf. also *Int. Emen.*; II, 30.

⁸ Cf. *Short Treatise* Part I, Ch. II, note ††, no. 2, p. 22. Spinoza seems frequently to have had specifically in mind the necessity of enforcing clearly these distinctions which run the danger so easily of appearing equivocations and paradoxes. Cf. above pp. 63-64 and p. 102.

of knowledge is God, and the correct order of philosophizing arrives at things by their derivation from God. There is no difficulty from the fact that the primary postulate of Spinoza's philosophy makes thinking involve necessarily an infinite substance. Even on the grounds of modern mathematics there can be no objection to such a procedure, since it does not postulate that this system is an existential one; whatever existence is involved in it follows as a deductive consequence from a fundamental postulate. Ultimately, though not absolutely, all thinking is of God. But that relation of the two necessitates that the mathematical demonstration begin, not with thinking, but with God, so that human thought does not emerge significantly till the demonstration of Proposition XXXI of Book I. "By intellect indeed (as is self-evident) we do not understand absolute thought, but only a certain mode of thinking, which mode differs from others such as desire, love, etc., and therefore must [by the definition of mode] be conceived through absolute thought, that is, it must be so conceived through some attribute of God which expresses the eternal and infinite essence of God, that without it it can neither be nor be conceived." And in the scholium to that proposition Spinoza limits himself to speaking of the intellect because nothing is so clearly perceived by us as it is.

Difficulties arise, however, because it is more usual to think of the genesis of human knowledge in psychological than in metaphysical terms. One of the characteristics of philosophy since Spinoza has been a tendency to look for the origin of thinking, not in its derivation from the rationalities it considers, but in its occasion and occurrence in some particular mind. Philosophers who look for that resolution of the problem of knowledge seem to have been impressed chiefly by the paradox that the intellect should, for these thirty-one propositions that precede the deduction of the intellect, have been engaged in perceiving and examining the nature of God. This has a suspicious look to modern eyes, and modern critics, even when their theistic predilections are soothed by the massive spectacle of God at the head of the *Ethics*, have shown signs first of breathlessness to reach the examination of how the human mind knows — and then of horror when it is shown that the

mind knows because the deduction has made it dependent on and in a sense identical with the mind of God. For Spinoza even the separation of emphasis would have been equivocal, since the mind in all its thinking expresses the infinite and perfect essence of God. The question of how we come to have adequate ideas has in the *Ethics* a metaphysical significance; it is not a problem of how such ideas arise in us, but rather a certainty, since we have them, that they are adequate and derived from God. All that need be known of the intellect is implicit in God and may be derived whenever it is needed from the definitions of mode and of God and from the axiom that a true idea must agree with its *ideatum*. And in point of fact the fundamental thought of the definitions and axioms is introduced repeatedly in scholia and propositions so that the primary postulate yields as consequences three significant points: that the nature of reality is such that it is penetrated, not by the senses, but by the intellect; that the mind knows first and best that which is most intelligible; that the mind's knowledge of itself involves a knowledge of God's essence or of the substantial nature of things.

II

THE demonstration of God's existence, then, is possible, not only because God may be thought about and may be known, but because knowledge in general is determined by the being of God. He is known therefore not only as he is the object of a particular thought but as he is the necessary basis of all thought. Obviously a proposition concerning most subjects, as, say, a proposition in geometry, may be true and still not be a statement of fact. An actual cause would be necessary if it were to be true as well of a thing actually existing. But if knowledge be considered in itself, all propositions which involve no mutually contradictory and incongruent notions are true. Such true ideas, howsoever far they may be removed from particular things, indicate something of reality. "A true idea must agree with its *ideatum*, that is (as is self-evident), that which is contained in the intellect objectively, must be granted necessarily in nature."⁹ The activity of the intellect, there-

⁹ *Eth.* I, 30, dem.; II, 71.

fore, whatever its content or conclusions, indicates a reality; it must express the eternal and infinite essence of an attribute of God. The intellect is actual in thought and although it is to be referred to *natura naturata*, it is part of nature. The problems of logic and of thought, of course, remain, but this reality which thinking implicates makes clear that those problems should arise, not in the discovery of concepts which will image some real thing or situation, but in the discovery of concepts from which the full reality of the things can be deduced most readily. Since the universe is derived from principles which have no beginnings, it will be seen that the solution of this problem of logic goes back to definitions which express the formal cause of the thing. It is not a problem of truth and falsity in the sense of marking an irreconcilable dichotomy between the two and distinguishing and detecting them, but a problem of comparative reality; all statements express reality, but some statements express reality more completely or express more reality than others; error grows only out of fictions to which literal assent is given. This is significant in determining the nature of God, since in at least this sense, all ideas are in themselves true ideas (though not ideas of existent things) and the very existence of ideas sets forth a necessary ground on which they are based. Even the possibility of contradictory hypothesis adumbrates a being concerning whom one of two contradictory propositions must be false. To say this is to say that from the fact of thinking it follows that God must exist, infinite, simple, and perfect.

Spinoza's scientific method and his criticism of experimentation are the consequence of this conviction. If the nature of extension is known, any hypothesis may be formed and any hypothesis will have equal certainty with any other. Once the laws of motion are expressed, all phenomena derived from extension can be explained; but motion is the general *natura naturata* of extension, and therefore in effect, any physical hypothesis which is consistent with the nature of God is true. The better hypothesis is merely the one from which the nature of the particular physical situation under investigation can be deduced more readily. The laws of motion however could never be

reached by experience alone; they depend on metaphysical principles which any reflection on experience implies. [This is the background of Spinoza's criticism of Descartes and Bacon. Their misconceptions of the nature of mind and the ground of error are derived in final analysis from a misconception of the nature of God. As soon as thinking and experience are examined, they reveal intellect, and intellect is conceivable and possible only in the foreground of an intelligible realm which is the whole of its possibility and to which experience, though it is diverse from thinking, may be seen in hypothesis to conform.

These convictions, or more precisely, the one fundamental conviction that the sequence of things and ideas implies an unchanging basis in reality, is present even in the earliest philosophic writings of Spinoza. The preference which he expresses in the *Short Treatise* for proofs of God *a priori* is a consequence of this conviction as is also his wariness concerning Descartes's defense of the appeal to God's goodness for the warrant of certainty and the defense which he substituted for it. It becomes an explicit axiom in the *Principles of Descartes's Philosophy*. Clearly if the universe could be explained wholly by the chains of events which string through time and space, thinking would require only body and a nervous system; but if the content of thought be considered instead of its occasion, the question becomes one of perfections and not of occurrences; an infinite regress is inconceivable in thought. It is an axiom therefore that the "objective" reality of our ideas requires a cause in which the same reality is contained, not only "objectively" but formally or eminently.¹⁰ In the *Metaphysical Reflections* he is concerned with the same notion. The present existence of things can not be the cause of their future existence; the only cause of it is the immutability of God.¹¹ No finite or imperfect being can be conceived unless an infinite and perfect being, that is, God, be considered first.¹²

That this peculiarity of thought and being was expressly in Spinoza's mind at the time of the composition of the

¹⁰ *Prin. Phil. Pars I, Ax. 9; I, 155-156.*

¹¹ Cf. *Cog. Met. Pars II, cap. I; I, 251-252.*

¹² Cf. *Cog. Met. Pars II, cap. III; I, 253.*

Ethics is not to be doubted. On the twenty-fifth of March 1667 he wrote to Jarig Jelles¹³ concerning a writer who professed to refute Descartes's demonstration of the existence of God. "Descartes's axiom, I confess, is in a certain sense obscure, as you say, and it might have been expressed more clearly and truly thus: 'that the power of thinking to think is not greater than the power of nature to exist and to act.' This is a clear and true axiom, by which the existence of God follows most clearly and effectively from his idea. The argument of the aforesaid author which you mention shows clearly enough that he does not yet understand the matter. It is true that we could go on to infinity if the question is to be solved in all its parts in the way he suggests, otherwise it is a great stupidity. If, for example, some one should ask by what cause a determined body is moved in a particular way, it would be proper to answer that it is determined to such a motion by another body, and that again by another and proceeding thus to infinity. It is proper, I say, to reply thus, because it is a question only of motion and we assign a sufficient and eternal cause of that motion by supposing continuously another body. But if I should see a book filled with the most sublime meditations and beautifully written, in the hands of an ordinary fellow, and if I should ask him whence he had the book, and if he should answer me, that he had copied it out of another book of another fellow, who also knew how to write well, and proceeded thus *in infinitum*, this would not satisfy me; for I had not inquired only about the figures and the order of the letters, about which alone he answered, but also about the meditations and the sense which their composition indicated; the going back *in infinitum* supplies no answer to this." So, again, as soon as it becomes a question, not of the accident which led a given person to some certain thought, but of the significance to be attached to his having had that thought, the consideration is carried to metaphysical realms and eventually to God. This is the pure essence of the aristotelian argument. It is a little surprising that a writer who expressed so low an opinion of Aristotle should have caught the spirit of it so precisely as to recognize

¹³ *Epistola XL (olim 45); IV, 187-188.*

that Crescas misunderstood the argument from a first cause¹⁴ since he did not realize that it rested on the impossibility of an infinite regress of causes.¹⁵

The definitions of mode, substance and God set forth the fundamental supposition of the *Ethics*, that thinking and existence involve a being more fundamental than the body which exists or the mind which thinks. When the conviction is stated in mathematical form, the problem presents a crucial point — is the act of thought or any instance of thinking relevant to the postulate that thinking implies the existence of a perfect substance? Consequently does the postulate acquire more than a postulated truth if an example of thinking is established? Or does the mathematical method require that the demonstration be completely unconcerned with experience? and are other postulates therefore possible, such as, that thinking does not occur and consequently the existence of a perfect being does not follow, or that thinking does occur but it is discrete and implies nothing beyond its own existence and its own logical content? Spinoza would insist that the first assertion is absurd because one must think to make it, and that the second is meaningless since thought which has no implications beyond itself would not deal in significances and therefore would not be thought. If any existence, even that of thinking, is relevant to a postulate, then God is a necessary reality, and Spinoza's system is not merely a mathematical deduction dependent on his postulates and drawn from them: it is also an assertion of a metaphysical reality to which all experience is relative and a statement of a logical norm to which all propositions may be referred. But whether or not a theorem of existence can follow from postulates, it is neither surprising nor a violation of mathematical procedure to introduce the conviction into the definitions and axioms of the system; at worst Spinoza can be found guilty, not of a misuse of method, but of an overconfidence in the certainty of his deductions concerning the ultimate nature implied in existence and discourse.

¹⁴ *Epistola* XII to Meyer (*olim* 29); IV, 61–62.

¹⁵ Contrast the interpretation of this argument developed by J. S. Mill in *Theism Part I Argument for a First Cause* (Longmans, Green and Co., New York, 1885, p. 142) in which still another misinterpretation is set forth.

Modes are defined as the modifications of a substance or that which is in something else through which it may be conceived, and it is made axiomatic that all things are either in themselves or in other things, and that the knowledge of effect depends on the knowledge of cause and involves the same. It is not difficult to deduce thence that the essence of things can not be the cause of their existence or their duration, but that both are derived from a being to whose nature alone existence pertains, or that, furthermore, the essence of things can not be conceived without God.¹⁶ To question the procedure, however, on any other grounds than that of the logical cogency of the deduction from postulates of a theorem of necessary existence would appeal to empirical sensibilities which have no place in a mathematical deduction.

The foundations on which Spinoza's doctrine of knowledge is built are clear from this metaphysics and this logic; ideas may be true and still need not be true of matters of fact or existence, with the obvious exception, that all true ideas of the totality of things must necessarily refer to an actual reality. "We can have true ideas of modifications which do not exist, since, although they do not exist outside the intellect, their essence is so comprehended in something else that they can be conceived through it. But the truth of substances is not outside the mind unless it is in them since they are conceived through themselves. If any one should say then that he has a clear and distinct idea, that is a true idea, of substance and nevertheless doubted whether such a substance existed, it would certainly be the same as if he said that he had a true idea and nevertheless doubted whether it were false (as is manifest enough to any one who considers it); or if any one should say that substance was created, he would say likewise that a false idea was made true, than which clearly, nothing could be conceived more absurd. And so it must necessarily be acknowledged that the existence of substance like its essence is an eternal truth."¹⁷ This is stated in metaphysical terms too; whether it be approached *a priori* from the nature of God or *a posteriori* from the nature of the

¹⁶ Cf. *Eth.* I, 24, cor. and 25, dem.; II, 67, 68.

¹⁷ *Eth.* I, 8, sch. 2; II, 50.

intellect; the fundamental truth is that God is substance — that which is in itself and is conceived through itself, and the conception of which does not depend on the conception of any other thing from which it must be formed.¹⁸ Moreover from the nature of God it is seen that he is best known in and through himself. Though he is illustrated in every thought and event, he has need of nothing for his illustration; by only being we must know him. "To produce an idea of God in us, there is no need for another special thing that shall have what is to be produced in us, but only such a body in Nature whose idea is necessary in order to represent God immediately."¹⁹ All things so follow from God that he is present directly to every being that thinks and in every thought.

The aspects and signs of this conviction might be examined through all the length of Spinoza's philosophy. It is most obvious at the bottom of the distinction between *natura naturans* and *natura naturata*, and more important still, it not only signalizes the necessity of a perfect being but indicates the mechanism by which transient intelligences may come in contact with an eternal intelligence and be aware of ideas which are unchanging. Although the intellect is itself a particular *natura naturata*, its nature is governed and set by *natura naturans*. The most obvious and important consequences of this conception of knowledge are in the demonstrations of the existence of God. In the *Short Treatise* Spinoza had already insisted on the superiority of the demonstration *a priori* and had criticized the thomist attitude by which such proof is impossible. Later he indicated the implied objection to the *a posteriori* proof: it supposes that the infinite cause could be demonstrated from finite effects and that the supremely intelligible source would be known less perfectly than things derived from it. It is interesting to observe that the opposition goes back to an aristotelian-platonic antithesis. If general ideas are derived by a process of abstraction from the data of experience, then God is to be recognized primarily and only from the evidences of his handicraft in the created and formed universe; but if experience is only the means to re-

¹⁸ Cf. *Eth.* I, def. 4; II, 45.

¹⁹ *Short Treatise*, Part I, ch. II, p. 39.

call the mind to a higher reality, the recognition of that reality will depend on experience only for its occasion, not for its materials, and the mind will be led by steps to know God directly. In the first case the existence of an infinite cause is inferred from his effects because they can not be explained without him; in the second the existence of an infinite being is inferred from his nature because the perfection of that nature involves existence. The antithesis is the more pronounced in that the existence of a source of all things can be demonstrated directly and rationally only in the first theory in which that source and the nature of things is not rational or subject to discursive statement. The aristotelian conception in which the universe is supremely intelligible and in which reason is the proper and adequate instrument for examining and knowing things, has no logical and direct proof for the existence of God. Albertus Magnus and Thomas Aquinas, working with the datum of a logical and comprehensible universe, could only indicate a line from the intelligible order of things to a source of that order. God is implied in the world and in that sense is the basis of experience. But philosophers who conceive the universe affectively as a structure of love in which man is first a creature of will or impulse and only then, as guided by impulse, a creature of reason since he expends himself to understand that which he desires and loves, such philosophers are faced with no insuperable limitations but are free to embark on impressive logical demonstrations of God. Augustine, Anselm, Alexander of Hales, Bonaventura, Matthew of Aquaspartas have no difficulty or hesitation concerning ontological proofs. God could be proved rationally in the case of St. Augustine precisely because he was convinced that the reason was insufficient to construct first principles; St. Thomas Aquinas did not doubt that it could do that and that the principles were in the mind. For St. Augustine, therefore, the fact that the mind can affirm is proof that God exists and is good; Aquinas can deduce from the fact of thinking nothing more than that man is possessed of an intellect and exists in a world that is intelligible. Yet the total consequences of the two would seem surprisingly similar despite the divergence of the paths they travel. Only in full an-

alysis are they antithetical: when St. Augustine consults reason, he consults God and does it with love and humility, for reason can arrive at truth only as God is its guarantee; but when Aquinas consults God, he consults reason and does it with assurance, for God is supremely rational.

The Thomists stand in Spinoza's mind rightly as important antagonists, for they would deny all his first assumptions concerning the nature of knowledge and its relation to the universe. Since they do not begin with God they will be in error concerning God himself and the things that follow from him. They violate the order which Spinoza refers to as the "order of philosophizing."²⁰ Whereas Aquinas, as a consequence, offers five *a posteriori* proofs for the existence of God and denied the possibility of an *a priori* proof, Spinoza offers two *a priori* proofs and one *a posteriori*, and for even that one he apologizes on the plea that it is more easily perceived *a posteriori*, and forthwith converts it to an *a priori* form.²¹ The first proof is based on the impossibility of the contrary hypothesis; God's essence would then be supposed not to involve existence, which would be absurd. The absurdity is apparent if one consider the definitions of God and of substance. God exists because he is in himself and is conceived through himself; he must therefore be cause of himself and must exist necessarily. This is clearly a demonstration which is relevant only to the most perfect being; on that point Spinoza reassures Oldenburg—the existence of most things does not follow from their definitions alone, but follows from the idea or definition of an attribute of God.²² The second proof appeals to this same fundamental distinction. A reason or cause must be assigned for the ex-

²⁰ It is relevant that this is the order that Aquinas called the theological order, whereas the opposite order is, for him, the philosophic one. Cf. *Contro Gentiles*, II, 4. "*Exinde etiam est quod non eodem ordine utraque doctrina procedit. Nam in doctrina philosophiæ quæ creaturas secundum se considerat et ex eis in Dei cognitionem perducit, prima est consideratio de creaturis et ultima de Deo; in doctrina vero fidei, quæ creaturas nonnisi in ordine ad Deum considerat, primo est consideratio Dei, et postmodum creaturam; et sic est perfectior, utpote Dei cognitioni similior, qui seipsum cognoscens alia intuetur.*" By way of contrast see *Eth.* II, 10, sch.; II, 93-94.

²¹ *Eth.* I, 11 and sch.; II, 52-54.

²² *Epistola* IV to Oldenburg; IV, 13.

istence of non-existence of each thing. In most cases that reason does not follow from the nature of the thing itself, but from the order of universal corporeal nature. But this very circumstance requires that there exist of necessity that concerning which no reason or cause is given which could prevent its existence. If such a cause were given it would be either in the nature of God or in another substance outside God; but a substance of another nature would have nothing in common with God, and so could not remove God's existence. But if the cause of his non-existence were granted in his own nature, then his nature would involve a contradiction, which would be absurd. Once more the fundamental postulate is obvious here — that the nature of things is such that it comprehends a single whole which, though it embraces all the contradictions of thought and all the oppositions of what on an internal standard become truth and error, can not itself be contradicted.

The proof *a posteriori* depends on precisely the distinction that was made in the third proof of Descartes. Ability to exist is a power and inability to exist a weakness; the existence of anything implies the existence of something which exists necessarily. This is only a development of the obvious fact that an absolutely infinite being would have more power to exist than finite beings, and therefore either nothing exists or a being absolutely infinite necessarily exists. Applying this to particular existences, we exist in ourselves or in something else which exists of necessity. All that is needed to see that God necessarily exists is the definition of God. This is transformed to an *a priori* proof by the simple recognition that since the ability to exist is a power, the more reality a thing has the more power it will have to exist; an absolutely infinite being has therefore an absolutely infinite power of existence, and consequently exists absolutely.

All three proofs depend for their cogency on the analysis of God's nature which finds his existence implicated and involved in his essence. The mechanics of the demonstration is literally what it has been satirized as — the drawing of God's existence by a sorites from the definition of God,

of substance, and of *causa sui*. But this is, as the critics of it suppose,²³ a dissimulation of postulates by means of nominal definitions, only if the primary supposition of the whole system is incorrect. If, on the other hand, a postulate can be formed such that the existence of God can be demonstrated from it, and if the truth of the demonstration then rests, not on the postulate, but on the nature of things which the postulate, since it is thought, implicates as well as states, then obviously the demonstration of God from his definition is justified. There is no paralogism involved but only a recognition of one of the paradoxes of thinking, that any thinking, even erroneous thinking, is a true illustration of thinking and an indication therefore of a rational system.

Moreover, at this point the crucial importance of the unity of Spinoza's thought is clear in its metaphysical form. The identification of God and Nature, *Deus sive Natura*, is as much a symptom of the necessity of unity, as is the insistence that ethics depends on physics and metaphysics. The ethical and psychological conclusions may be put off, then, since they depend upon the metaphysical point of unity, until the assertion of unity has been submitted to metaphysical and logical examination. Even before the understanding is taken up in the Second Book of the *Ethics*, Spinoza's distrust of experience is unmistakable; true knowledge can never be derived from experience or the senses, although of course without experience knowledge is impossible. Much of the confusion which may arise from Spinoza's demonstration, is paradoxically the consequence of the clarity with which he distinguishes the processes of learning from those of demonstrating. The method of philosophy is the method of demonstration, and the *Ethics* follows that method rigorously. We learn of all things, even of God, *a posteriori*: that he exists is attested in experience; but it is no more to be supposed that the demonstration of his existence is an appeal to the intimation of it in experience than that any other logical demonstration has its cogency as a note drawn from the biography of the demonstrator. The peculiarity of Spinoza's treatment of God is that God is the first cause and the seat of first prin-

²³ See for example, Louis Rougier, *Les Paralogismes du Rationalisme*, pp. 180-181.

ciples (*causa sui* in the more medieval expression which he preferred); first principles have usually been thought to be, not derived from experience nor consciously preëxistent in the mind, but rather present in the mind when it has worked over the consequences of experience.

Knowledge and demonstration then must begin with God; the nature of God is known first and best. Such a statement is easily refuted if it is taken as history, for it is not intended to retell the order of events. Any justification, moreover, if the statement is not immediately granted, must appeal to some thought or experience, which must in turn involve the principles which it is meant to illustrate. In a word, what we know of God's nature must be learned from our experience, for our knowledge is part of our experience; but his existence is involved in and follows from his nature. The enterprise of Book I of the *Ethics* is in demonstrating that all knowledge would be lost in uncertainty were it not for a unity of substance without which the fundamental principles of knowledge would be without foundation. *A priori* proofs alone are cogent, yet the recognition by a finite intellect of an absolute whose very nature involves existence, must seem a more perfunctory performance than the demonstration of any of the subservient truths which depend on it. The proofs of the existence of God are designed to show that existence follows from the very nature of God, but the limitations of the intellect must seem to turn them into consequences drawn from the nature of understanding. The first proof appeals to the absurdity of posing the contrary hypothesis that God does not exist; the second to the contradictions of supposing a cause for God's non-existence; the third to the propriety of assigning an infinite power of existence to an absolutely infinite being. They are all forms for attributing existence, on the ground of a strictly logical necessity, to the absolute and the total; but when the demonstrator is envisaged — a fairly late consequence in the system — these logical consistencies in which the *a priori* proofs find the existence of God involved, may be seen to be the logical requirements of human thought. There follow then the *a posteriori* formulations — thinking implies God; being implies God; living implies God.

The proposition, God exists, is relevant in a unique way

to the whole system of things which can be deduced in strict mathematical form from the first being and existence. All truths of finite beings can be doubted — even the truths of mathematics; the accomplishment of the enterprise undertaken in Book I is the demonstration of the existence of a being on whom all existences depend and the indication of a truth from which all truths follow. One could, in other words, doubt the truths of mathematics only if one were ignorant of the nature of God. The apodictic demonstration of the existence of God is consequently the only one that mathematics could accomplish; strictly the existence of God follows from his definition. With his existence follows the guarantee, on no hypothetical ground, of the truth of the first principles of metaphysics — the unity of substance, the relations of attributes to each other and to substance, the sequence of modes, and all the others which are present in knowledge and being. Here moreover is the tight metaphysical unity of the system, for all propositions are in a significant sense propositions about the subject of Book I, about God and his attributes; if this were not true, much that is most important in the knowledge of the modes could not be known certainly. It is not disruptive of the unity of Spinoza's thought that definitions are introduced from time to time, as they are in Books II and III, for such an introduction is the necessary preliminary to the further explication of the truths stated in Book I. It might otherwise be insisted properly that the subject matter of the later books is far from that of the First Book, that the human mind and the passions have nothing in common with God, that the knowledge of God warrants no conclusion concerning them, and that God does not reappear in the *Ethics* until he is introduced mysteriously again in Book V. Viewed thus the definitions and axioms of Book II are disconcerting: modes had been defined in Book I, now body and idea are defined; the notion of individual things is introduced in a definition, and therefore essence, although it had figured in the definitions of Book I must at last itself be defined; the adequacy of an idea may be spoken of as well as its truth; duration is added to eternity; reality and perfection take care of the gradations of essence and existence; and finally as if without mathematical preparation

man and the modes of thought appear in the axioms. That these developments bring the conclusions of Book I to particular applications is obvious, but there is no ground for the supposition that Book II adds anything of logical cogency to the conclusions of Book I. In the homely aptness of its illustrations, it makes the doctrine of God more persuasive by developing consequences related to man. But far from tying Book I to reality, the middle books of the *Ethics* are themselves hung on a pattern of first principles which have their foundations in Book I; the formulations of the principles are different only that the relation of body and mind, and the relation of the passions and the understanding may be considered. The basis of ethics is in metaphysics, and therefore the analysis of the nature of God alone lends apodictic certainty to such later resolutions.

III

THE nature as well as the existence of the rational whole may be known deductively from these considerations. Substance will be simple, single, indivisible and infinite. From the fact that substance is such that existence pertains to its essence, it follows that there can be only one substance and that that substance must be simple, not multiplex. Moreover, the existence, since it is predicated of its essence, must be eternal. "In the next place [it follows from the fact that existence pertains to the essence of substance that] all substance can be understood only as infinite. In fact I call the modifications of substance modes, the definition of which in so far as it is not the very definition of substance, can involve no existence. Wherefore, although they exist, we can conceive them as non-existent: from which it follows that when we consider the essence alone of modes and not the order of all Nature, we can not conclude from the fact that they exist now that they will exist later or that they will not exist, or that they have existed before or that they have not existed. From this it appears clearly that we conceive the existence of substance to be wholly different from the existence of modes. Whence arises the difference between eternity and duration; by duration we can explain

the existence only of modes; but by eternity we can explain the existence of substance, that is, the infinite realization of existence, or if the expression be permitted, of being (*infinitam existendi, sive, invita latinitate, essendi fruitionem*)."²⁴ Substance and eternity are among the many concepts which can not be conceived by way of the imagination but can be envisaged by the reason alone; to attempt to explain them by notions like time, measure, number, which are only aids to the imagination, is to permit the imagination to run riot.²⁵

Reality in the highest degree must be contained in the nature of God. But the more reality a thing has the more attributes it will have, and each attribute must be conceived through itself.²⁶ The demonstration follows easily and rigorously from the demonstration of God to the deduction of his infinite and perfect attributes. From an empirical point of view however the process is unjustified and the conclusions not a little distressing. Spinoza is prepared to admit that these infinite attributes transcend human experience, and further that of most of them we have not even an intimation. In the *Short Treatise* he says that from the consideration to which Nature has so far been subjected, only two attributes are discovered for the perfect being. But these can not be all, since there is *a something* which tells us not only of more, but of infinite perfect attributes which must belong to this perfect being before he can be said to be perfect. That *something* can not be accounted for by the two attributes, nor by anything in us, and so it must be supposed that we derived it from the infinite attributes themselves.²⁷ The attributes which are so indicated are each infinite and perfect; in the *Short Treatise* they are spoken of as substances. "As regards the attributes of which God consists, they are only infinite substances, each of which must of itself be infinitely perfect. That this must necessarily be so, we are convinced by clear and distinct reasons. It is true, however, that up to the present only two of all these infinities are known to

²⁴ *Epistola XII (olim 29)* to Meyer; IV, 54; for the unity of God cf. *Cog. Met. Pars II*, cap. II; I, 252-253.

²⁵ *Epistola XII*; IV, 57.

²⁶ *Eth.* I, 9 and 19; II, 51.

²⁷ *Short Treatise* Part I, ch. I; p. 19, note †.

us through their own essence; and these are thought and extension.”²⁸ This limitation which seems in the expressions of the *Short Treatise* to be set by the state of research at the moment appears later as a necessary human limitation. The mind can know only two of the infinite attributes of the absolutely infinite being, for “the human mind can acquire knowledge only of those things which the idea of a body actually existing involves, or of that which can be inferred from that idea.” The idea of the body does not involve any other attribute than those of thought and extension.²⁹

The curious situation which makes it possible that the human mind may know there are infinite attributes and yet recognize the impossibility of knowing more than two by their essences, illustrates nicely the limitations of experience and imagination. Experience can give intimations of only two of the attributes which reason can demonstrate to be infinite. The only satisfactory approach to the attributes therefore is to consider them in their essence, that is, *a priori* as they follow, infinite and perfect, from the nature of a perfect being. If they are considered from the point of view of human experience, it must be found, not that we experience the modes of infinite attributes, since we do not, but only that our experience indicates that the more reality of existence can be assigned to a thing, the more attributes it has. Spinoza stresses the point when he writes to the group in Amsterdam which met to discuss his philosophy. They had been having some difficulty with his definitions—he undertakes to remove it with an example. “If I say that each substance has only one attribute, this is only a proposition and needs proof. But if I say that by substance I understand that which consists of only one attribute, that will be a good definition, but then entities consisting of more than one attribute will have to be designated by some name other than substance. When, however, you say that I do not prove that substance or being can have several attributes, perchance you did not want to follow the proofs. For I gave two, first that nothing is plainer to us than that every being is conceived by us

²⁸ *Short Treatise*, Part I, ch. 7, p. 52, note †.

²⁹ *Epistola* LXIV (*olim* 66) to Schuller; IV, 277-278.

under some attribute and that the more reality or essence a given being has, the more attributes must be attributed to it. Therefore an absolutely infinite being must be defined, &c. The second, and I think this the better proof is that the more attributes I attribute to any being, the more I am compelled to attribute existence to it, that is, the more I conceive it according to true reason, the contrary of which would clearly be true if I feigned a chimera or something similar.”³⁰ De Vries seems to have replied to this in a letter which we have lost, asking if we need experience to know whether the definition of any attribute is true. Spinoza replies that experience is useful only to determine the existence of modes, since this can not be concluded from their definition. But experience can not penetrate the essence of things, and since the essence of attributes does not differ from their existence, this will be reached by no experience.³¹ It seems curious enough that of the two arguments to prove the infinite attributes of God, detailed to de Vries, it is not the second (which Spinoza speaks of as the better argument) but the first that figures in the *Ethics*: “It is far from absurd to attribute several attributes to one substance; indeed nothing in nature is more clear than that every being must be conceived under some attribute, and the more reality or being it has, the more attributes expressing necessity or eternity and infinity, it has; and consequently nothing could be clearer than that the being must necessarily be defined as absolutely infinite, which consists of infinite attributes, each of which expresses a certain eternal and infinite essence.”³² But either, of course, is a pure *a priori* argument. Experience is irrelevant to truth save in its implications that carry beyond experience; almost all the knowledge we have of God’s attributes (by which we are led to a love of God and to highest beatitude) depends on the truth which was drawn directly from the primary postulate — that existence belongs to the nature of God or that the concept of God involves a necessary existence in the same way as the concept of a triangle involves that the sum of its angles be

³⁰ *Epistola IX (olim 27)* to de Vries; IV, 44-45.

³¹ *Epistola X (olim 28)* to de Vries; IV, 47.

³² *Eth. I, 10, sch.*; II, 52.

equal to two right angles; God's existence and essence are eternal truths.³³

There is some danger to the conclusions that are drawn from the perfect reality of God, since they require on the one hand that he be a simple being and on the other that he be possessed of infinite attributes. His simplicity must at least seem to be put in danger each time his attributes are spoken of, and his attributes must be merged whenever his simplicity is emphasized. It is an old theological antinomy, but in the literature which the *Ethics* has evoked there is much that has been written in full innocence of theology. The consequence is that the antinomy which Spinoza seems to regard as the accurate statement of the paradox of thinking and experience, can become the spring of a veritable freshet of criticism — emphasize one alternative and this is a naïve idealism in which everything is illusion and only substance real, lean on the other alternative and there is an unstable dualism or perhaps a pluralism bound together by an artificial and unsuccessful device. Attribute is, of course, defined to be that which the intellect perceives as constituting the essence of a substance. But it could not follow from that, in a universe conceived on a spinozistic plan, that the only reality of the attribute is in the perception of the intellect: the intellect, even infinite intellect, is *natura naturata*, and there must be something in *natura naturans* to account for it. Like anything else which the intellect conceives concerning substance, the attribute must be contained also in reality. From the statement therefore that attribute is that which the intellect perceives as constituting the essence of substance, one must conclude, not that the attribute is appearance and the substance reality, but that substance could not exist without this attribute. God is simple being, and

³³ Cf. *Prin. Phil. Pars I*, 5 sch.; I, 158. This once more is a doctrine which Spinoza held from the very beginning and for precisely these reasons. He states them repeatedly in the *Short Treatise*. "Of Nature all in all is predicated, and . . . consequently Nature consists of infinite attributes, each of which is perfect in its kind. And this is just equivalent to the definition usually given of God." (*Short Treatise*, Part I, ch. II, p. 25.) Again, "to a being which has any essence attributes must be referred, and the more essence one ascribes to it, the more attributes also must be ascribed to it, and consequently if a being is infinite then its attributes also must be infinite, and this is just what we call a perfect being." (*Short Treatise*, Part I, ch. II, p. 26.) See also note †, p. 21.

his attributes are distinctions of reason without which he could not exist.³⁴ In fact Thought is seen definitely to be an attribute of God precisely through the amount of reality or perfection which can be predicated of it.³⁵

But the danger of this treatment of God's attributes lay, Spinoza felt,³⁶ in that it considered as creatures many of the attributes which theologians and all other writers ascribed to God. Thus, although God is a unique and infinite being, uniqueness and infinity are not attributes which show forth his essence.³⁷ On the other hand Spinoza contended that other qualifications were attributes of God and that they were badly understood by theologians when they were taken as creatures. God and Nature, as a consequence of these revisions, are not separated in Spinoza's treatment as they usually are. As early as the *Metaphysical Reflections*, he had suggested modifications of the ordinary division of the attributes: the knowledge of God is no more like human knowledge than the Dogstar is like the barking animal which is also called dog, and therefore the attribute is more a name than a thing. He suggests, as he had done in the *Short Treatise*, that attributes be divided into those which explain God's active essence and those which indicate no action but only a mode of his existence. Of the last sort are unity, eternity, necessity, etc.; of the first sort intelligence, will, life, omnipotence, etc.³⁸ But even this division, which would incur enough opposition, is a division only within the attributes commonly ascribed to God, the *propria*; the division of them is made on a basis given in the *Short Treatise*: the last variety, the *propria* of God's existence, are attributed to God in consideration of all the attributes; the first variety, those of God's action, in consideration of only one attribute. Behind these common attributes consequently and behind their division are the infinite attributes of which we know only two; these latter are the fundamental reality of the common attributions to God.

Spinoza's use, then, would definitely not permit of an

³⁴ Cf. *Cog. Met. Pars II*, 5; I, 259.

³⁵ *Eth.* II, 1, sch.; II, 86.

³⁶ *Epistola VI* to Oldenburg; IV, 36.

³⁷ Cf. *Int. Emen.*; II, 29, note 2.

³⁸ *Cog. Met. Pars II*, 11; I, 275.

interpretation of the attributes which would deprive them of substantial reality. To define them as that which the intellect perceives as constituting the essence of a substance, is equivalent to saying that they pertain to that substance. In fact definition 4 is referred to in just these terms; in proposition 19 of Book I the definition is cited to the effect that an attribute is "that which expresses the essence of divine substance, that is, that which appertains to substance."³⁹ This is not a loose expression, but states only the consequence of the fact that bodies are not distinct from ideas and that thought and extension so pertain to God that God as Intellect is not different from God as Extension. "Thinking substance and extended substance are one and the same substance, which is now comprehended under this and now under that attribute. Thus also a mode of extension (any body) and the idea of that mode are one and the same thing, but expressed in two modes, which certain of the Jews seem to have perceived as if through a cloud, for they said that God, the intellect of God, and the things conceived by that intellect are one and the same. For example, a circle existing in nature and the idea of an existing circle which is likewise in God are one and the same thing, explained through different attributes; and therefore, whether we consider nature under the attribute of Extension, or under the attribute of Thought, or under any other attribute, we shall find one and the same order and one and the same connection of causes, that is to say, the same things follow one the other."⁴⁰

Each attribute then expresses the entire substance, and that man can know only two aspects of God is an impediment, not to his knowledge of God, but to his perfect knowledge of God; it is a statement that to know God perfectly would be to be a perfect being — only God can know the infinite attributes of God. Thought and extension are diverse aspects — they are active aspects — as it were of God in dynamic development of himself, so that his manifestations in each is complete and separate from those in all other attributes. God is not something higher

³⁹ *Eth.* I, 19, dem.; II, 64.

⁴⁰ *Eth.* II, 7 sch.; II, 90.

and more abstract than attribute; when you reach the attribute you have God; the logic of the relation of the attributes to God is not one of the inclusion of parts in a whole but rather a logic of total and causal manifestations. The attribute, indeed, is substance, "except that it is called attribute with respect to the understanding, which attributes to substance some certain nature." Substance is called by its various attributes in the same fashion that the third patriarch is called Israel and the same person is called Jacob, the name Jacob having been given because the patriarch in question had caught hold of the heel of his brother. And in the same fashion, a plane is a surface which reflects all rays of light without altering them; a white surface is the same surface with only this difference, that a plane is called white with reference to a man looking at it.⁴¹ It is important to remember that the name Jacob and Israel were not mere appellations to be given without reason; the third patriarch was so called because he was both Jacob and Israel. According to the *onomastica sacra* Israel was *Prævalens Deo* and Jacob, *Supplantator*; it is of metaphysical importance therefore that though Jacob is not Israel, the same person is Jacob and Israel. Or in less medieval terms it is evident that the same man may be a husband and a citizen, yet to be a citizen is not the same as to be a husband. So too the same substance is each attribute and the attribute is rightly ascribed to God by the intellect, yet no attribute is any other attribute (though it is the same thing), and it is the substance only in respect to the understanding. By attribute is understood "all that which is conceived through itself and in it-

⁴¹ Cf. *Epistola* IX (*olim* 27) to Simon de Vries; IV, 46. The example of the white surface is one of the interesting instances of the persistence in Spinoza of an aristotelian formula. Aristotle's *Metaphysics* contains just such a distinction, and although it is used in a different doctrinal context, it is not impossible (but by no means imperative) that Spinoza came upon the figure in later aristotelian writings. "But not the whole of this is the essence of a thing; not that which it is *propter se* as a surface is *propter se* white, because being a surface is not *identical* with being white. But again the combination of both—'being a white surface'—is not the essence of surface. Why? Because 'surface' itself is repeated. The formula, therefore, in which the term itself is not present but its meaning expressed, this is the formula of the essence of each thing. Therefore if to be a white surface is to be a smooth surface, to be white and to be smooth are one and the same." *Metaphysics*, Z., Book VII, chap. IV, 1029b.

self so that its concept does not involve the concept of any other thing.”⁴²

Extension as an attribute of God is not made up of bodies, nor is Thought cogitations. The intellect of God does not perform a process of thinking, going over ideas similar to ours; it is not passive and limited by the nature of things, but pure act and involving therefore existence.⁴³ Outside God there is no object of knowledge given, but he is himself the object of his knowledge and in fact he is his knowledge itself. His knowledge of all things is his self-knowledge from which the entire universe proceeds; he had to seek no material outside himself, but things were fabricated in essence and existence by his intellect or, what is the same, will.⁴⁴ This quality of God's thought is the statement of the intelligibility of the world in the fact that with every object exists an idea. There is no distinction between God's action in knowing things and in causing them, for his knowledge of them is the conception of their essence involved in the order of nature. God's thinking does not arise from an experience of the world ordered in some fashion, but rather his thinking is the creative conception of the world and gives order and meaning to it. Ideas are possible to us because God has thought them, but in us their genesis and foundation are different than in God. Ideas are therefore in nature, but “it is to be remarked,” Spinoza warns, “that we are speaking here of such ideas which necessarily arise from the existence of things together with their essence in God; but not of the ideas which the things now actually present to us or produce in us. There is a great difference between these; for the Ideas in God do not arise as they do in us by way of one or more of the senses, which are therefore almost always only imperfectly affected by them; but from their existence and their essence just as they are. My idea, however, is not your idea though one and the same thing produces them in us.”⁴⁵

God's intellect is concerned then with existence and es-

⁴² *Epistola* II to Oldenburg; IV, 7.

⁴³ Cf. *Cog. Met. Pars* II, 10; I, 270.

⁴⁴ *Cog. Met. Pars* II, 7; I, 262.

⁴⁵ *Short Treatise*. Part II, ch. 20, p. 129, note.

sences, and his thinking determines both. For a thing to exist means that an idea of his thought corresponds to a concrete reality under the attribute of extension; and since neither extension nor thought is the aggregate of particulars included under it, the nice metaphysical problem of the relation of the attributes to the modes arises. God is pure actuality and perfect infinite substance; the attributes express his infinite essence, not in passive relation to any thing else since there is nothing beyond God, but actively and perfectly — though not absolutely. But for each attribute of God there is an infinite mode or a general *natura naturata* which expresses, actively again, but discursively, the perfect nature; the sum of all things and all ideas is the result of the activity of these infinite modes. Problems of psychology and physics arise from the interrelations of particular modes and the ideas which arise from their existence and essence. *Natura naturans* consists only of that which is in itself and conceived through itself, that is, it is substance and such attributes as express infinite and eternal essence. *Natura naturata* is all that follows from the necessity of the nature of God or of any of his attributes. The gap between them is the difference between particular things together with the actual causal laws that move them and the fundamental nature from which such things and actions must proceed; it is the difference of ideas together with the implications that can be traced among them from the principle of implications or the implications of them as a whole. All things in experience are to be explained by Motion and Rest, the general *natura naturata* of extension; all thinking is to be explained by Will and Intellect — the general *natura naturata* of Thought; will and intellect, that is, occupy the same place in the nature of God as motion and rest.⁴⁶ If metaphysical and logical considerations did not make God *a priori* necessary, he would have to be postulated as a principle to explain that the order and connection of ideas is the same as the order and connection of things.

It is the more to be emphasized that God is not the sum of things, that Thought is not will and intellect and Extension is not affected by motion and rest. [The will and

⁴⁶ Cf. *Eth.* I, 32, cor. 2; II, 73.

intellect which would constitute the essence of God must differ completely from our will and intellect, and the words would be applied to them equivocally as the word dog is applied to star and animal: properly, will and intellect do not appertain to the nature of God.⁴⁷ His intellect would be the succinct epitome of the laws of being, since the understanding by which he knows all created things and the will and power by which he determined them, are one and the same thing.⁴⁸ For a thing to be contrary to the will of God would be for it to be repugnant to his intellect too.⁴⁹ In the same way it is absurd to think of Extension as a corporeal mass (as Spinoza insists Descartes did) subject to division and to the laws of motion and inertia, and made up of the sum of all bodies. To suppose that extended substance is composed of parts and produced by the addition of bodies really distinct, one from the other, is of the same order of absurdity as to suppose that by bringing together a great many circles, squares or triangles or something else different in essence might be produced.⁵⁰ In the *Ethics* Spinoza returns to the contrast in almost the same words. "Indeed it is no less absurd to suppose that corporeal substance is made up of bodies or parts than to suppose that a body is composed of surfaces or surfaces of lines, or lines of points."⁵¹ "Matter," he goes on to say, "is the same everywhere, and its parts can not be distinguished one from the other, except in so far as we conceive matter to be modified in different modes, whence its parts are distinguished one from the other in mode but not in reality. For example we can conceive water, in so far as it is water, to be divided and its parts separated one from the other; but not in so far as it is corporeal substance, for then it is neither separated nor divided. Again water, in so far as it is water, can be made and destroyed, but in so far as it is substance, it can neither be made nor destroyed." Still, although extension is not made up of material things as of parts, the relation of extension to bodies is so necessary that "if one

⁴⁷ *Eth.* I, 17, sch.; II, 61-63.

⁴⁸ *Cog. Met.* II, 7, note; I, 261.

⁴⁹ *Epistola* XIX (*olim* 32) to Blyenbergh; IV, 90.

⁵⁰ *Epistola* XII (*olim* 29) to Meyer; IV, 55.

⁵¹ *Eth.* I, 15, sch.; II, 59.

part of matter were annihilated, at once all extension would vanish." ⁵² Destroy essence or existence and the whole of Nature is dislocated and destroyed.

IV

IF God be conceived simply as the principle by which things have intelligibility as well as being, the distinction between the nature of the whole of things and the nature of things as determined by their derivation from the whole, is fundamental. The demonstration of God's existence displayed the paradox; the complementary demonstration of the existence of infinite modes from the necessity of God's nature encounters the same difficulties since it travels over the same ground. The existence of anything was seen to involve essence or being, and the disclosure of essence carried the analysis to a single primary being; in that fashion at least one existential theorem, the proposition of God's existence, is to be deduced from a postulate. It was remarked, in other words, that things are diverse in existence and that experience encounters only that diversity; that thinking penetrates the essential interdependence of things; that from the analysis of that interdependence, not general similarities, but the nature of intellect and of motion emerge; and it is discovered finally that both intellect and motion imply a substance essentially dissimilar to the experience with which the analysis began. By the very fact that God's intellect is the explanation of the things that proceed from it, it must be totally different from them. "As God's intellect is the only cause of things, that is, the cause of their essence and their existence, it must differ from them in respect to its essence and in respect to its existence. For that which is caused differs from its cause in precisely that which it derives from it. For example, a man is the cause of the existence but not of the existence of one of them should perish, that of the truth), and so they can certainly agree according to essence, but they must differ in existence, and therefore if the essence of another man (for the later is an eternal

⁵² *Epistola* IV to Oldenburg; IV, 12.

other will not perish on that account; but if the essence of one of them could be destroyed or made false, the essence of the other would also be destroyed. Therefore a thing which is the cause of the essence and the existence of any effect must differ from that effect both in respect to its essence and its existence.”⁵³ The fact that the laws of motion explain all bodily activity, must abstract Motion itself from the class of bodily things.

This is once more, not a metaphysical confusion, but an essential distinction in the nature of things. “Things are considered as actual in two ways by us; either in so far as we conceive them to exist in relation to a certain time and place, or in so far as we conceive them to be contained in God and to follow from the necessity of the divine nature. When we conceive them as true or real in this second way, we conceive them under the form of eternity, and the ideas of them involve the eternal and infinite essence of God.”⁵⁴ This is only to say that it is not by a simple and unmediated process that infinite things in infinite modes proceed from God’s supreme power or infinite essence; all things follow from God, and always with the same necessity — but the necessity which binds each object to the being of God operates in a twofold manner, directly since the object derives its essence from God, indirectly since it exists by his power. The essence of the things must have established precisely what it is to be just that thing and then besides, the actual conditions must have occurred which will bring into existence one or more of such things. Clearly no definition of a thing will determine how many such things will exist; on the other hand, for a thing to exist means that there have been implications and conditions, that is, logical requirements which have been actually fulfilled. No things, not even men, were created; their bodies existed in some other form before them and they were generated, not made.⁵⁵ To say that a thing is or

⁵³ *Eth.* I, 17, sch.; II, 63.

⁵⁴ *Eth.* V, 29, sch.; II, 298-9. Cf. *Cog. Met. Pars I*, cap. II; I, 98. *Primum enim esse scilicet Essentiæ, nihil aliud est, quam modus ille, quo res creatæ in attributis Dei comprehenduntur: esse deinde Ideæ dicitur, prout omnia objective in idea Dei continentur; . . . esse denique Existentiæ est ipsa rerum essentia extra Deum, et in se considerata, tribuiturque rebus, postquam a Deo creatæ sunt.*”

⁵⁵ Cf. *Epistola V*; IV, 14.

is conceivable is to recognize the logical implications of its being, but a thing will not be made to exist by the fact only that its idea is free from contradictions. "The reason why a square circle does not exist is implicated in its very nature, for clearly it involves a contradiction. The existence of substance on the other hand follows from its nature alone, for it involves existence. But the reason why a triangle or a circle exists, or why it does not exist, does not follow from its nature, but from the order of universal corporeal nature; indeed it must follow from that order of nature either that the triangle exists necessarily at this moment or that it is impossible that it should exist now. And this is manifest of itself. From which it follows that that must exist necessarily of which no reason or cause is granted which hinders its existence."⁵⁶ This, it is to be observed, is the obverse of the paradox involved in the initial postulate of the system. Now, when it is a question of deducing the world from the being of God, precisely the same difficulties are encountered as came up in the demonstration of the existence of God: from the being of God the essence of all things may be deduced; to arrive at existences requires the intervention of modifications of the eternal attributes. It is the same gap which is encountered between *natura naturans* and *natura naturata*, with God on one side in whom all things are contained as geometric figures are contained in their formulæ, and the universe on the other in which all things are contained because they are the parts that make up the whole of finite things. Yet the distinction, despite its sharpness, is merely a distinction of the reason; finite things are indeed *natura naturata* "in so far as they are considered as things which are in God, and which can not exist or be conceived without God."⁵⁷

The problem of the mediation between the active principle that shapes the universe and the things that are formed by it, is consequently not a question of passing from one essence to another, but rather of transforming and limiting the original essence to particular circumstances. Individual thought and individual bodies express literally

⁵⁶ *Eth.* I, 11, dem. 2; II, 53. Cf. *Eth.* I, 8, sch. 2; II, 49-51.

⁵⁷ *Eth.* I, 29, sch.; II, 71.

the nature of God in a limited manner.⁵⁸ Between them and God is only their limitation; they need for mediation in intercourse with him only some limiting expression of his infinite nature. This limitation is in the infinite modes which follow directly from God's attributes; they are of two sorts: the principles that govern particular individual existences and also the sum of all changing finite things. The distinction follows from the different metaphysical origins of the two, for "every mode which exists necessarily and infinitely must follow *either* from the absolute nature of some attribute of God, *or* from some attribute modified by a modification which exists necessarily and infinitely."⁵⁹ Spinoza gives examples of both these types of infinite modes or general *naturæ naturatæ*.⁶⁰ The absolutely infinite intellect (*intellectus absolute infinitus*) is produced in the first manner in the attribute of Thought; motion and rest in Extension. Then these modifications further modify their respective attributes to produce infinite modes of the second variety, the total of the whole universe (*facies totius Universi*) which though it varies in infinite modes, remains always the same as a whole.⁶¹ In the last of these infinite modes, the world of finite things is at last brought into existence and with it the evolving flow of things conditioned by the first eternal modes. Individual things are here and they are nothing but the modifications of God's attributes, or modes by which those attributes are expressed in a certain and determinate way.⁶²

All things and all works in Nature then are perfect though limited expressions of God. The fact that things exist in the world, some more perfect than others, is itself further evidence of the divine perfection. God made the universe as it is in all the steps of the hierarchy of its perfection precisely "because the laws of his nature were

⁵⁸ Cf. *Eth.* II, 1, dem.; II, 86.

⁵⁹ *Eth.* I, 23; II, 66.

⁶⁰ *Epistola* LXIV (*olim* 66) to G. H. Schuller; IV, 278.

⁶¹ Intellect (as also motion and rest) in the *Short Treatise* is referred to as the Son, product or immediate creation of God. Richter (*Spinozas Philosophische Terminologie*, pp. 103 ff.) finds a long medieval background for the expression Son of God. It should be remarked that when the same notion turns up in the *Ethics* it is in the no less medieval guise of *Intellectus actu infinitus* (*Eth.* I, 30; II, 71).

⁶² *Eth.* I, 25, cor.; II, 68.

so comprehensive that they sufficed to produce all that can be conceived by any infinite intellect." ⁶³ "... it is just perfection in God, that he gives to all things, from the greatest to the least, their essence, or, to express it better, that he has all things perfectly in himself." ⁶⁴ All things in the world are perfect; imperfection arises only from comparison with a most perfect and real being. The attributes then which interpose between God and man make clear the status of man, since "that effect is most perfect which is immediately produced by God and in proportion as intermediate causes are needed to produce it it is imperfect." ⁶⁵ Body and mind are the, in this sense, imperfect finite things that make up nature, their essences fixed and their existences determined. Metaphysically they are of peculiar interest since they illustrate the double necessity in which the universe is involved — the logical necessity of essence and the causal necessity of things. "A thing is said to be necessary either by reason of its essence or its cause." ⁶⁶

So far as the individual thing is concerned it is caught in the infinite chain of causation which moves inexorably, and everything that passes a finite duration owes its existence to some link of that chain. Every individual thing, everything which is limited and leads a determined existence in some time or at some place, can exist and can be moved to action only if it is determined to action and existence by another cause which is itself finite and which is also determined in its existence by another cause, which is similarly moved, and so down the endless vista of causes. ⁶⁷ This is in part what it is for mind and body to be part of

⁶³ *Eth.* I, App.; II, 83.

⁶⁴ *Short Treatise* Part I, ch. 6, p. 50-51. Spinoza refers almost brusquely to the doctrinal background of these statements, since it was of common currency in the middle ages. Aquinas thus insists that the perfection of the universe consists in the diversity of its creatures. For God to have created the universe of creatures of equal perfection and of one condition would have been equivalent to making a human body of which all the parts were eye or a house of which all the parts were roof. "*Et cum ipsa universi perfectio et multitudinem et diversitatem rerum requirat, quia in una earum inveniri non potest propter recessum a complemento bonitatis primæ; necesse fuit ex suppositione formæ intentæ quod Deus multas creaturas et diversas produceret.*" *De Potentia* III, 16 ad resp.

⁶⁵ *Eth.* I, App.; II, 80.

⁶⁶ *Eth.* I, 33 sch. I; II, 74.

⁶⁷ *Eth.* I, 28; II, 69.

nature; that they are part of the flux of things is complementary to the metaphysical and logical participation they have, by the same fact, in substance. "All bodies are surrounded by other bodies, and determine them and are determined by them reciprocally to existence and operation in a fixed and determined manner, preserving always the same proportion of motion and rest in the whole of them, that is to say in the whole universe. Hence it follows that every body, in so far as it exists modified in a definite manner, must be considered as a part of the whole universe, which agrees with its whole and is closely connected with the other parts; and since the nature of the universe is not limited . . . but absolutely infinite, it is clear that the parts are modified in an infinite number of ways by this nature with its infinite number of powers, and are compelled to pass through an infinity of variations. But in respect to substance I conceive each part to be united in a closer union with the whole. For as I tried previously to demonstrate in my first letter . . . since it is of the nature of substance to be infinite, it follows that each single part pertains to the nature of substance, and without it it could neither be nor be conceived."⁶⁸

The Thought which comprehends all essences and from which all ideas proceed and the Extension which determines all corporeal nature and from which all bodies proceed, are both implied in experience. Obviously they will be relevant in an ethics, but their relevance, like that of God, to the problems and questions raised, whether they be metaphysical or ethical, is an extreme and ultimate one, since their relation to things is fundamental. For metaphysics the relation is the explication of the paradox that psychological thoughts and physical things should be so diverse and yet be commensurable. There is, besides, the dichotomy of being and existence on which ethics is divided; it is not to be concerned only with being, as mathematics or metaphysics is, yet its hope for scientific precision is in the possibility of referring the chain of existences to considerations which go back finally to being. Extension and thought, though they are the double foundation of experience, emerge intelligibly only in thought, and the nature of real-

⁶⁸ *Epistola XXXII (olim 15) to Oldenburg; IV, 172-173.*

ity is penetrable to man only by the power of the intellect. If there is a sense in which ethics is concerned with existence and behavior, its concern with them is in view of substance and being. Human ideals must be envisaged by the one faculty which can examine the basis of things and actions. The paradoxes of ethics as Spinoza expounds it, arise from the necessity that conclusions drawn from postulates must touch on experience and existence, but for all that, it is to be no less a purely mathematical science. It must seem to lack precision to any stated situation and it must seem to deal in general terms since it is based on substance; of substantial reality and of infinite things it treats definitely and in particular; as regards actions, it may demonstrate the rules of behavior regulated by reason or it may demonstrate the pure mathematics of reason and understanding.

CHAPTER II

HUMAN KNOWLEDGE

I

FROM the demonstration of God's existence it follows that the idea of God will be necessary to explain any thing which enters experience. Most particularly the nature of thinking is seen to involve the nature of God; an explanation of human knowledge will be possible only after and in the degree that God's nature is understood. Both thinking and existence were implicated in the postulates on which the mathematical demonstration of God's existence was based: now, if anything exists there must be an infinite and perfect being, and thought, too, is possible only if there is an infinite thinking being. The converse of the truth postulated in the proof of God is crucial in the deduction of human thinking: the nature of thinking is determined by the nature of the perfect being; to know thinking or to know anything, God must be known first. Either nothing exists or an infinite perfect being exists; if he does not exist he could never be produced. Moreover, if God did not exist, the mind would understand more than nature could furnish, and what it understood would obviously be false.¹ The existence of anything, then, implies the existence of God, and if the truth about anything be examined accurately and adequately, the thing must be seen according to its nature as it is determined by and flows from God. This is true of thinking if it be considered in its relation to the intelligible whole of things; it is not the psychology of thinking. In it thinking is not taken as a product of the human organism by which it is limited and determined; conclusions drawn from such a consideration would be partial and incomplete. Human thinking is

¹ Cf. *Int. Emen.*; II, 29, note a.

determined by human nature only if human nature be viewed in the intellectual and physical Nature which in turn determines it, and not in its accidental properties and changes. The nature of man in that sense accounts for his thinking.

There are two problems here—one the philosophic problem of the basis of knowledge, of truth and the possibility of error, the other the practical problem of the method by which, in view of that basis, the mind may guide itself so that it may recognize error, avoid it, and come eventually upon truth in the best and most certain way. These are respectively the problems of knowledge which appear in the *Ethics* and the *Correction of the Understanding*. In the latter work Spinoza returns frequently to warnings that the problem he is considering is how the mind can follow out the order of true ideas and keep away from error; if it is asked on what grounds the mind can presume to truth, that is a question for philosophy. Since all true ideas are deduced from other true ideas with which we begin, it is clear that the question of how we are to deduce ideas correctly from the primitive one is distinct from the question of how and on what warrant that first idea is true. “Note,” he says in the *Correction of the Understanding*, “that we are not here inquiring in what manner this first objective essence is innate in us, for that appertains to the investigation of nature where these things are more fully explained, and where it is shown that without an idea there can be no affirmation nor negation nor any wish.”² Or when he wishes to show the possibility of fictitious ideas that he may distinguish them from true ideas, there is no need that the essence of ideas be shown: “meanwhile,” he says, “I give warning that I shall not explain here the essence of each perception through its proximate cause, for that appertains to philosophy.”³ So too when the true method of knowing is expounded as a kind of searching in the mind which is determined by a true idea, he appends a note⁴ to warn that the essential nature of that searching in the mind (*quærere in anima*) is

² *Int. Emen.*; II, 15 note n.

³ *Int. Emen.*; II, 19.

⁴ *Int. Emen.*; II, 15, note o.

explained in his philosophy. Finally, whereas questions of how memory and reminiscence operate belong to problems of method, on the other hand, whether or not there is anything in ideas themselves which opens them to corruption must be taken up in philosophy.⁵ Questions of method go back to the nature of mind and its relation to other things particularly to God, but the proper place for the investigation of that nature itself is in philosophy.

In the inquiry, finally, which is of highest importance, the question of whether there is a good to which living can be directed and which can confer its own quality of goodness on the life turned to it, there is one problem which is outstanding, that of correcting the intellect to make it able to understand things in the way which is necessary if it is to attain its true end. Such a method would be simply the way of knowing things truly or best. What that best way of knowing is, depends on the nature and capacities of the human mind; Spinoza left for his philosophy to decide what ideas and powers were proper to the mind; but he undertakes to determine how the mind should proceed to understand truly or best only on the background of his philosophy. When he turns in the Second Book of the *Ethics* to the problem of the Nature and Origin of the Mind, it is to take up the specifically philosophic question which problems of method indicate. It is an investigation of the origin of the mind in no anthropological sense, and though the nature of the mind is in question, it does not touch even on the borders of psychology. As Spinoza points out, there is no interest here in the individual causes of things but only in the true ideas of them; history is therefore totally irrelevant, for the origin of the mind is nowhere in the biography of man but in the nature of the attribute Thought. To have relations or dealings with other things is to be produced by them or to produce them;⁶ the mind since it is related to God, must, by that fact alone, have been produced by God. The origin of the mind is in the fact that the body is situated in a universe of intelligible relations. God is the source of the universe in that all things are ultimately related in

⁵ *Int. Emen.*; II, 31.

⁶ Cf. *Int. Emen.*; II, 16, note p.

a single whole, that thoughts follow in an ineluctable logical concatenation, and that things flow in an inevitable causal sequence. This sequence of thoughts, it must be insisted, is not the psychological sequence of an individual mind, but the logical dependencies and interrelations involved in ideas. The sequence of causes which flows from God is not the sequence of individual bodies; to explain the motion of any body, one must go, not to the particular body that caused the motion, but to the laws of motion and the notion of quantity on which motion depends. From these infinite modes the sequence is to the attribute of God under which they are subsumed, from understanding to Thought and from motion and rest to Extension.

Neither ideas nor causes would be possible without God. But purely formal considerations such as these would involve no actual existent thing. A single sequence flows from God with an identical necessity; one aspect of the sequence is intellect, the other aspect is motion and rest. The two operate in complete independence one of the other; and though they are the same sequence and though God is the cause of each, he is their respective causes so far as he is considered through separate attributes. By the operation of intellect and motion the world of particular minds and particular things is generated. The origin of the mind therefore is not only in the formal requirements which are its necessary conditions; the fact of complete intelligibility will not insure the existence of an instrument or organ to perceive that intelligibility, nor will it determine the fashion in which it is to be perceived and explored. As regards intelligibility alone, all ideas flow from the divine attribute of thought, ideas of things which do not exist as well as ideas of things which constitute the formal essences of individual things.⁷ Intelligible things and intelligible relations must be included in the idea of God no less than the ideas of things that actually exist. The human mind does not come into being by the fact of intelligibility but by the fact that in an intelligible world any thing that did exist would be involved in logical relations. From a purely logical point of view there is no

⁷ Cf. *Eth.* II, 8; II, 90.

difference between ideas of things that exist and ideas of non-existent things; the formal being of the two is the same. The difference between them is to be found in the sequence of actual causes, and to investigate that sequence is to appeal to experience rather than to intellect. God, to be sure, is the cause of the series of causes too, but otherwise than he is the cause of essences, not as an absolute thinking thing (*res absolute cogitans*), but in so far as he is considered as affected by another mode of thinking and again the cause of that in so far as he is affected by another and so on to infinity.

The mind owes its possibility and nature to God since without him it could neither be nor be conceived. Since it is idea, the attribute of Thought is its affecting cause. But it is impossible to deduce the mind, or any individual thing, directly from the being of God. Although the formal being of mind is in God as a thinking thing, the actual being takes its origin from the idea of an individual thing actually existing; in the case of the human mind that actually existing thing is the human body.⁸ All that is needed to bring the mind into existence is the existence of an individual body; when the body begins to exist, the mind is present in the flow of actual ideas. Moreover since thinking substance and extended substance are one and the same, and since therefore the order and connection of things and ideas which proceed from them is the same, the mind and the body are one and the same individual conceived now under the attribute of thought and now under the attribute of extension.⁹ But it is of metaphysical importance that the idea, though it is the same individual as the body, is yet different from its body. It sets the formal essence of the actual thing. The world of things is intelligible because of the circumstance that the formal essences of things not only constitute things in their characteristic properties but are themselves by nature intelligible. "A true idea (and we have a true idea) is something different from its object (*ideatum*): for a circle is one thing, the idea of a circle another. The idea of a circle is not something having a periphery and a center, as a circle is, nor

⁸ *Eth.* II, 11 and 13; II, 94, 96.

⁹ *Eth.* II, 21, sch.; II, 109.

is the idea of a body that body itself. And as it is something different from its object, it must also be something intelligible in itself, that is, the idea as regards its formal essence can be the object of another ideal (*objectiva*) essence and this second ideal (*objectiva*) essence, regarded in itself, will also be something real and intelligible, and so on indefinitely.”¹⁰

This is the origin of the mind; its nature follows readily from its origin. What the mind is, is determined by the nature of the body since the mind is the objective essence of the body; but it is still idea and part therefore of an infinite intelligence. As intelligence it is limited, of course, to particular circumstances; what the body is and does, will determine what the mind will think of, but in no causal sense, for the mind and body are the same thing; “the idea is constituted objectively in the same manner as its ideatum is in reality.”¹¹ Obviously, as the body enters into more relations and dealings and has more similarities with other things, its mind will be able to perceive more things truly. If there existed in nature an object which had no dealings with any other object, its rational essence would have no relation with other ideas; it would know no truth and no truth could be concluded concerning it. The first and innate rational element from which all development of the mind must originate is this idea of the body; whatever power the mind is to have will proceed from this idea — this is the essence of man, constituted by certain modifications of the attributes of God.¹² Other ideas can be formed in the mind by virtue of this first idea; other ideas will be knowledge of modifications of the mind itself and of its body; they will, as modifications, involve all the affirmations, negations and wishes of the mind. But not the least important aspect of the origin of the mind is that this first objective essence of the mind, as well as being the origin and source of all ideas of the mind, is also its standard of truth. “There must exist in us before all others a true idea as the innate instrument, and with the understanding of this true idea comes also

¹⁰ *Int. Emen.*; II, 14.

¹¹ *Int. Emen.*; II, 16.

¹² Cf. *Eth.* II, 10, cor.; II, 93.

the understanding of the difference between such a perception and all others." ¹³

Of each individual thing there is the objective aspect which constitutes its idea an intelligible thing, as well as a body which constitutes it an existent thing. As idea it will find implications both in its particular existence and its essential nature; it will know particular things and eternal things. The question raised in the Second Book of the *Ethics*, how knowledge is possible and of what sort it will be, finds its answer in these circumstances; the idea of a circle is the same thing as the circle with this difference, that it can be known; the idea of a man is the same as the man, save that it can both know and be known. Any man, Spinoza suggests Peter, must be body and idea in order to exist. The idea will be the formal essence of the actual person and will itself be real and different from the body. Since it is a rational essence, the idea of Peter will be intelligible and apt therefore to become the object of another idea; that is, other people may know Peter and have an idea of him. But an important difference marks their idea and distinguishes it from the original idea of Peter: the first idea is connected with the essence of Peter's body directly and can exist only so long as Peter exists, but the new idea is not connected with Peter. Ideas which people have of Peter may or may not be true; if the idea is true it will contain ideally (*objective*) all that the idea of Peter has in itself formally. But if it is an incomplete and partial idea, such as one might form of persons encountered casually, it will indicate the disposition of the person who has the idea rather than the nature of Peter himself. Moreover since it is unconnected with Peter it will continue as an idea as long as that disposition endures, regardless of whether Peter still exists or not.¹⁴

An idea which the mind entertains is nothing other than that—the form of an idea considered simply in its rational connections. For the mind to have an idea is for it to penetrate significantly the nature of reality, not therefore to discover things which actually exist, but rather to encounter the formal constitution of things and adumbrate

¹³ *Int. Emen.*; II, 16.

¹⁴ Cf. *Int. Emen.*; II, 14-15 and *Eth.* II, 17, sch.; II, 105-106.

a rationality. Knowledge is this activity of the mind; it must be reflective knowledge (*cognitio reflexiva*), since the mind can know only the modifications it perceives in itself and the interrelations of rational forms in which it finds itself implicated. This formal quality of ideas, this activity of God as attribute of Thought, is the basic intelligibility of things, and therefore true ideas arise in particular minds not through the efficacy of some efficient cause or by the operation of things on senses or on minds, but rather they arise by a relation of identity. The mind has true ideas because of what it is and not because of what it experiences. "For in truth the idea of the mind, that is, the idea of an idea, is nothing else than the form of an idea in so far as it is considered as a mode of thinking without relation to its object."¹⁵ The idea and its body are the same thing considered according to different attributes; the idea and the idea of an idea are the same thing considered under the same attribute. From this metaphysical beginning alone the specifications of the true method appear. "The true method is the way in which truth itself or the ideal (*objectivæ*) essences or ideas (for they all signify the same thing) are sought in the order they should be."¹⁶ What that order should be, must be discovered from a further examination of the nature of the mind.

Since the human mind is the idea of an actually existing body, its specific difference, the thing which distinguishes it from other minds, will not be in its own formal nature but in the nature of its body. Bodies, moreover, are not distinguished from other bodies by a difference of substance; all bodies agree in certain respects, since they all involve the conception of the same attribute and they can all be moved, accelerated in motion and stopped. The differences of bodies are differences in proportion of motion and rest. The mind therefore is the idea of a body characterized by a certain proportion of motion and rest; the mind will have recognizable properties drawn both from the similarities which the body bears to other bodies and from the alterations which can be worked in the body

¹⁵ *Eth.* II, 21, sch.; II, 109.

¹⁶ *Int. Emen.*; II, 15.

by changing the proportions of its motion and rest. Since the mind involves the nature of the body, whatever happens in the body happens also in the mind and happens with precisely the same references: the order and connection of things is only one, conceived now as bodily and now as intelligible. This is true of all nature, not merely of man; it is true of all individual things in nature which are in varying grades animate. The body, finally, is not too simple to account for the complex changes of the mind, for "no one has thus far determined what the body can do, that is, experience has not thus far taught any one what the body can do merely by the laws of nature and considered only as corporeal, and what it can not do save as determined by the mind." It is enough to realize, however, that the body can accomplish amazing things by its own force alone, and that it is no more in the power of the mind to determine the body to remain in motion or rest or any other state than it is in the power of the body to determine the mind to think. The relation is not discrete and causal; when the body is more apt for receiving impressions, the mind is more apt likewise for thinking and when the body is inert the mind likewise is inept for thinking.¹⁷

II

To know the nature of thought, consequently, it is essential to know the nature of the body. The requisite knowledge, however, is relatively simple; one need not be a physicist to be either good or wise. But in view of the relation of mind and body one should know how bodies are conditioned and determined. The lemmas of Book II of the *Ethics* furnish sufficient information for this: that bodies impinge one on the other, quicken the motion of one body, turn aside another from the course it pursued, sometimes aiding a motion, sometimes interfering with it. In short, bodies may impress something of their motion on bodies with which they come in contact, and may themselves react with altered motions from collisions. The resultant motions are always partly the effect of each

¹⁷ *Eth.*, III, 2 and 2 sch.; II, 141-144.

of the bodies that entered the situation. One and the same body therefore may be moved in various ways as the natures of the bodies that move it vary: on the other hand, various bodies may be moved variously by one and the same body.¹⁸ In the course of their motion, individual bodies may unite and move with a fixed speed, conveying motions to each other in a fixed ratio. The compounded bodies that are formed are some hard, some soft, some fluid, and so long as the ratio of motion remains unchanged the body remains the same, regardless of changes and alterations among its particular parts. Compound things may be united with still other things, form individuals more highly compounded, which may in turn be joined with others until it is easy to "conceive all nature to be one individual whose parts, that is, all bodies, vary in infinite ways without any change in the individual as a whole."¹⁹

The soul, moreover, as well as forming part of the intelligible whole of nature, is the idea of the body. From its relation to the body will come all its sensitive knowledge; it will know particular things by the modifications they cause in its body. All perception and all experience arise by way of bodily organs which are affected by bodily stimulations. Knowledge of this sort is *imaginative* knowledge; it depends wholly on changes in the body; it implicates eternal things, but its direct information is concerning the disposition of our own body rather than the nature of other bodies or of eternal things. What we know of individual objects is based on the inference made from such effects in us; these are *rerum imagines*, the indistinct reflections of the things they represent. The mind is passive in its knowledge of things, for knowledge of things comes from actions which the body suffers; the mind is apt to perceive more things in the degree that its body can be disposed in many ways.²⁰ But so long as it remains in that passive attitude, so long as it concerns itself with particulars, it will have only the incomplete knowledge which it can get from knowing modifications

¹⁸ *Eth.* II, Ax. I after Lemma III; II, 99.

¹⁹ *Eth.* II, lem. 7, sch.; II, 102.

²⁰ *Eth.* II, 14, 16 and cor. II; II, 103, 104.

of the body. "The human mind has no adequate but only a confused and mutilated knowledge of itself, of its body and of external bodies so long as it perceives things in the common order of nature, that is so long as it is determined externally by the fortuitous coming together of things to contemplate this or that." ²¹

Adequate knowledge of changing things is impossible; perceptions do not report what things are but only in what fashion our body receives an impression from them. This is true even of the mind's knowledge of the body of which it is the idea. It is obvious that the human body needs so many bodies for its continuous support and regeneration, that the mind's knowledge of its body must be mixed with innumerable elements and can be no more than partial. It can not know the component parts of the body, since by the nature of bodies they do not pertain to its essence save as they communicate their motions in a certain ratio; it could not know the duration of its body since that depends on the common order of nature and the disposition of things.²² It knows of the existence of the body, in fact, only by the modifications of it which it has perceived, and such perceptions give no adequate knowledge of its nature.²³ The mind, however, will perceive not only the modifications of the body but also the ideas of those modifications, and it will therefore know itself, but only in the same manner and no better than it knows the body.²⁴ And finally external objects are known only through the knowledge of modifications they have caused in the body. Such knowledge of individual things is not adequate and indicates rather the disposition of our bodies than the nature of things.²⁵

Ideas of modifications whether of body or of mind do not involve adequate ideas of either body or mind. Obviously such ideas, since they are the effects of the action of one thing on something else, involve adequate representations of only the effect of that action. They can be explained adequately in view of the total situation,

²¹ *Eth.* II, 29, sch.; II, 114.

²² *Eth.* II, 19, 24 and 30; II, 107, 110, 114.

²³ *Eth.* II, 19, 27; II, 107, 112.

²⁴ *Eth.* II, 20, 22 and 23; II, 108, 109, 110.

²⁵ *Eth.* II, 26, 31 and 16, cor. II; II, 112, 115.

but to take them in reference to the mind alone is to find them confused and obscure. Seen thus they are ill-substantiated inferences, like consequences without premises.²⁶ Still this is the only knowledge we can have of things actually existing, whether of our bodies or the bodies external to us or of our minds; and since individual things do exist there must be imaginative knowledge.²⁷

Knowledge of this order, all knowledge derived from experience, can pretend moreover to no universality. The information which the senses report is grouped in specious associations determined by individual experiences in definite times and places; it must vary with each man and his susceptibility. The imagination is nothing other than "certain fortuitous and unconnected sensations (so to speak) which do not arise from the power of the mind but from external causes, according as the body, sleeping or waking, receives certain motions."²⁸ That order, of course, is an accidental sequence bearing no relation to the logical order or sequence in which the divine mind conceived the things which sensation represent. Memory too is concerned with knowledge of this sort; it is the trace left in the body of the image of something the body has encountered. It "is nothing else than the sensation of impressions on the brain, accompanied by the thought to determine the duration of the sensation."²⁹ Memory, like imagination, is only of individual things for precisely the reason that imagination is affected only by the ideas of bodies. Memory "is nothing other than a certain concatenation of ideas involving the nature of things outside the human body, and this concatenation takes place according to the order and concatenation of modifications of the human body. I say in the first place, then, that it is a concatenation of those ideas which *involve* the nature of things which are outside the human body, and not of those which *explain* the nature of the same things. They are in fact ideas of the modifications of the human body and involve as much the nature of the human body as that of the external bodies. I say in the second place that this concate-

²⁶ *Eth.* II, 28 and dem.; II, 113.

²⁷ Cf. *Eth.* II, 19, 23, 26, 31; II, 107, 110, 112, 115.

²⁸ *Int. Emen.*; II, 32.

²⁹ *Int. Emen.*; II, 31.

nation takes place according to the order and concatenation of the modifications of the human body, to distinguish it from the concatenation of ideas which takes place according to the order of the intellect by which the mind perceives things through their first causes and which is the same in all men." ³⁰

Memory will follow out the association of ideas; things which are similar or which occurred together will tend in the future to be recalled together. "It is a law which follows necessarily from human nature that a man, when he remembers one thing, recalls immediately another thing similar to it or which he perceived at the same time that he perceived it." ³¹ Things that habitually come together, things that have affected the body at the same time, will return to the mind together. It is this association of ideas which makes it possible to give meanings to words and to conventional signs and symbols. *Pomum* can mean apple to a Roman, and according to his experience, foot-prints left by a horse in the sand will evoke the picture of a horseman and war to one man, and the picture of ploughed fields and peaceful occupations to another. ³² The nature of imagination and memory, moreover, leads to a further peculiarity of knowledge. Knowledge of individual things can not be stored in the human mind without confusion. The mind is limited in the number of things it can imagine distinctly and in detail at one time; that number can not exceed the number of images that the body can form at one time. When the images become confused in the body, the mind imagines things confusedly, comprehending all things without distinction under the concept of *being* or *thing* or of some similarly vague term. A natural association of ideas accomplishes the rest: similar things are brought together into single notions, less general than that of *being*, such as dog, horse or man, which take no account of the differences of size or breed or power among dogs and horses nor of the fact that one man is light and another dark and that the rationality of one man far exceeds that of another. Transcendental notions and transcen-

³⁰ *Eth.* II, 18 sch.; II, 106-107.

³¹ *Theo.-Pol.* cap. IV; III, 58.

³² Cf. *Eth.* II, 18 and sch.; II, 106, 107; and *Int. Emen.*; II, 31 ff.

dental terms are formed because the mind is powerless to imagine all the individual things that are presented to it; the characteristics of many things are merged into a few outstanding qualities. The notions formed thus will vary with each individual conceiving them, so that the notion of man for some will be an animal of erect stature, for others a laughing animal, a featherless biped or a reasoning animal, each person forming his universal ideas of things by the qualities he is most accustomed to remark.³³

In all knowledge of this sort, in imagination, memory, and transcendental notions, the mind is determined strictly by what the body suffers and by what images it can form of things that act on it. In all knowledge from experience and in all knowledge of the existent world, the mind is passive and is able to form only inadequate ideas. The mind will have inadequate ideas when it is determined externally; it will have adequate ideas when it is determined internally, that is, when it is determined by the fact that it regards many things at once, to understand their agreements, differences, and oppositions one to the other.³⁴ This is the beginning of *reason*, and as in imagination, though now in a different fashion, the mind's knowledge varies in kind and manner with variations in the nature of the body. It was seen that the mind is apt for perceiving many things in the degree that its body is apt for performing and receiving actions; more specifically now, in the case of reason, the soul is the more apt to perceive many things adequately the more its body has things in common with other bodies.³⁵ The imagination depends on knowledge of modifications of the human body; reason arises from the common notions of men. Knowing the modifications of the human body, the mind will know some of the properties which it possesses in common with other bodies, such as the relation of the body to the mind and to other bodies; and other properties are perceived like these, involved in the human body. The human mind, then, knowing its body, will have adequate knowledge of certain ideas and notions. These are common to all men and form

³³ Cf. *Eth.* II, 40, sch. I; II, 120-121.

³⁴ *Eth.* II, 29 sch.; II, 114.

³⁵ Cf. *Eth.* II, 39, cor.; II, 119-120.

the principles of our ratiocination. "The things we understand clearly and distinctly are either the common properties of things or that which is deduced from them."³⁶

The process of reasoning must be directed by the need that it proceed carefully from the clear ideas with which it starts. The mind knows truly when its knowledge depends on itself alone; "as the actions of a body depend on itself alone and as fewer bodies concur with it in acting, to that degree the mind is more able to understand distinctly."³⁷ If reason avoids the corrupting influence of things outside itself, which things it can know only partially, it can reach truth by its own powers and according to the laws of its own nature. "All clear and distinct perceptions which we form can arise only from clear and distinct perceptions which are in us; nor do they acknowledge any other cause external to us. Whence it follows that the clear and distinct perceptions which we form depend on our nature alone and on its certain and fixed laws, in other words, on our absolute power, not on fortune, which is to say, on causes which, although also acting according to certain and fixed laws, are yet unknown to us and alien to our nature and power."³⁸ All clear and distinct ideas which are derived by the proper processes of reason, depend on clear ideas with which reason began; whatever ideas follow in the mind from ideas which are adequate in the mind, are themselves adequate.

The body, of course, even in those actions which depend most wholly on its own power expresses no nature directly except its own; in reason the mind knows strictly nothing but the body of which it is the idea. The efficacy of reason depends on the circumstance that the body has properties identical with other bodies, and that therefore, knowing the properties of the body, the mind is possessed of wider scope and application than a reference only to the body. But that circumstance contains still another aspect which Spinoza regards as the foundation and possibility of all truth: the mind to exist at all must have at least one adequate idea. In metaphysical language this is a recogni-

³⁶ *Eth.* V, 12 dem.; II, 289. Cf. *Eth.* II, 40 sch. I; II, 120-121.

³⁷ *Eth.* II, 13, sch.; II, 97.

³⁸ *Epistola XXXVII (olim 42)* to J. Bouwmeester; IV, 188.

tion of the necessity that the idea of every body or individual thing actually existing involve the eternal and infinite essence of God. Even physically the fact that every thing which exists, is determined by other things to exist in a certain manner, is not sufficient to explain the existence of the thing; there is also the force with which it persists in existing; that force proceeds from the eternal necessity of the nature of God. So far as it is the objective essence of the human body, the mind expresses the nature of that body; it is itself essence and part of the infinite intellect. This is to say that the human mind, since it is the idea of its body, will know God, and its knowledge of the eternal and infinite essence of God will be adequate.³⁹ Or, expressed still otherwise, that the human mind involves in itself an eternal essence, since there is granted necessarily in God the idea which expresses the essence of each human body under a form of eternity. "The idea which expresses under a form of eternity the essence of the body is a certain mode of thought which pertains to the essence of the mind and which is necessarily eternal."⁴⁰

From this idea arises the possibility of a third kind of knowledge, *intuitive knowledge*, in which the mind knows things, not by the general notions under which they could be grouped, but either as they are in essence or as they are generated by their proximate cause. The proximate cause, it must be remembered, has no reference to the chain of causation in individual things, but to the dependence of the thing on some eternal principle. For example, the relation of body and mind may be known by reason, but intuition, knowing that same relation, would supply the cause of the union in the nature of the attribute Thought, since there is in Thought an idea of every actually existent body. Such knowledge is not merely adequate, but true. "Thought is said to be true when it involves objectively the essence of some principle which has no cause and is known through itself and in itself."⁴¹ Ultimately this is a knowledge of things which can be complete only by deduction from one of the attributes of God by way of the operation of the

³⁹ Cf. *Eth.* II, 45 and 47; II, 127, 128.

⁴⁰ *Eth.* II, 23 sch.; II, 295; cf. *Eth.* II, 22; II, 295.

⁴¹ *Int. Emen.*; II, 26.

general *natura naturata* of that attribute. As imagination is possible by the fact that the mind knows the changes of the body, and as reason is possible by the fact that the mind has general notions based on properties which the body has in common with other bodies, so intuition is possible by the fact that the mind involves an eternal essence in the thinking attribute and therefore knows God. "As regards the human mind, I conceive it to be a part of nature; for I maintain that there exists in nature an infinite power of thinking, which, in so far as it is infinite contains in itself all of nature ideally (*objective*) and of which the thoughts proceed in the same manner as Nature, that is, its object (*ideatum*). Moreover I regard the human mind as identical with this power, not in so far as it is infinite, but in so far as it is finite and perceives only the human body, and in this manner I maintain the human mind to be a part of the infinite understanding."⁴²

Imagination, reason, and intuition are all the natural consequences of the nature of the body and of the functions of the mind. It is the very nature of our mind, since it is a thinking thing, to form true ideas; inadequate ideas arise in us as well as adequate ideas because we are part of a thinking being of which certain thoughts as a whole constitute our mind and certain thoughts only in part.⁴³ Inadequate and confused ideas therefore follow from the same necessity as adequate or clear and distinct ideas. Ideas are inadequate only to the individual mind; the limitation is the limitation of the intelligent agent. Whenever the human mind perceives anything, it is God in so far as he constitutes the essence of the human mind who has the idea of that thing; when the knowledge of God involves several ideas, not only the idea which is the essence of the human mind but also ideas of other things, the human mind then, since it makes up only part of the situation, has inadequate knowledge.⁴⁴

Since this is the nature of knowledge, it follows that there is nothing positive in ideas by which they could be called false, but their falsity consists in the privation of some

⁴² *Epistola XXXII (olim 15) to Oldenburg.*; IV, 173-174.

⁴³ *Int. Emen.*; II, 28.

⁴⁴ Cf. *Eth.* II, 11, cor.; II, 94-95.

knowledge which would be useful for their explication. Imagination is predestined to error, since it is by nature partial knowledge. But its ideas are only inadequate; since they take in the results of an action, not all the circumstances nor even the action itself, they must lack some relevant information. Falsity is the partial ignorance which must go with partial knowledge. The knowledge involved in inadequate, confused, mutilated ideas must miss some of the truth of the situation; falsity consists in the privation of knowledge which those ideas involve.⁴⁵ It is not mere ignorance, but the assertion of a belief on grounds which are insufficient for it. But the representation follows so necessarily from our sensitive apparatus, that even a knowledge of truth can at most make us aware of the errors of the imagination; it can not remove them. If we know the nature of vision, we can make rectifications of what we see, but we will none the less continue to see as we did. "Thus when we look at the sun we imagine it to be some two hundred feet distant from us; which error does not consist in that imagination alone, but in the fact that while we thus imagined it we were ignorant of the cause of the imagination and of the true distance. For although we may afterwards learn that the sun is more than six hundred times the earth's diameter distant from us, we imagine it nevertheless to be near us: for we do not imagine the sun to be near us because we are ignorant of the true distance, but because the modification of our body involves the essence of the sun in so far as the body is affected by it."⁴⁶ In itself the imagination is not false; it can be considered inadequate only as it is supposed that it renders exact testimony concerning the things whose action affected us. "The imaginations of the mind, regarded in themselves, contain no error, that is, the mind does not err by that which it imagines, but only in so far as it is considered to lack the idea which cuts off the existence of those things which it imagines at present to itself."⁴⁷ The truth of a true idea consists in the fact that it is absolute and perfect in us; it does not depend partly on our nature and partly on something else, and consequently

⁴⁵ *Eth.* II, 35; II, 116.

⁴⁶ *Eth.* II, 35, sch.; II, 117.

⁴⁷ *Eth.* II, 17, sch.; II, 106.

the idea as we have it is absolute or as it is in God; it must be adequate and true.

It is a necessary consequence that as the mind turns from the contemplation of the things of the imagination to those of the intellect, the order and nature of its objects change too. The particular things which enter the imagination are practically incalculable by their vast number and unknowable by the variety of the details which contribute to their evolutions and changes. All individual things are by this fact contingent and corruptible, for contingency is nothing other than this impossibility of knowing adequately the infinite number of individual things. That we consider things, whether with respect to past or future, as contingent, depends solely on the imagination.⁴⁸ But it is the nature of reason to perceive things truly, that is, as they are in themselves, and reason therefore considers them, not as contingent but as necessary.⁴⁹ Things enter the imagination in their temporal relations; but reason, since it explains them by notions which are common to all, explains the essence of no individual thing — reason explains things therefore not in relation to any time but under a certain form of eternity (*sub quadam æternitatis specie*). Intuition considers them in their very essence as they are derived from their proximate causes and under the very form of eternity. The devices of the imagination, words and images, are constituted only by bodily motions and are ordered according to the accidental concatenation of experience; but since it is the nature of the intellect to see things through their first causes, the intellects of all men will perceive things in the same order. The gap which separates ideas from words and images is the distinction between adequate and inadequate ideas, and the hierarchy which Spinoza finds in the ways of knowing serves to emphasize the importance for clarity that they be distinguished sharply.⁵⁰

III

THE questions on which the *Correction of the Understanding* embarks, take their meaning in relation to this meta-

⁴⁸ Cf. *Eth.* II, 31, cor. and 44, cor. I; II, 115, 125.

⁴⁹ *Eth.* II, 44 dem.; II, 125.

⁵⁰ Cf. *Eth.* II, 18, sch. and 49, sch.; II, 107, 131-132.

physical background. Ethical and practical concerns will be determined by the fundamental nature of things on which they depend. Practical questions arise concerning the mind and the body related as they are and situated as they are in the world: first, to what end shall we endeavor to direct our thoughts; second, what is the best perception by means of which we can arrive at our perfection; third, what is the first way the mind shall try to go in order to begin well?⁵¹ The answers to these questions have been adumbrated in the statement of the philosophy. To achieve its highest good the mind should be directed to that which is the source of intelligibility and most highly true. The answers to the second and third questions too are determined by the nature of the mind. The mind has been shown to be capable of three distinct ways of knowing. Imagination perceives many things and forms universal notions either from individual things presented mutilated, confused and without order to our intellect (this is *cognitio ab experientia vaga*), or from signs. Reason bases its universal conceptions on the common notions and adequate ideas we have of the properties of things. Intuition proceeds not from general notions, but from the adequate idea of the formal essence of certain attributes of God to the adequate knowledge of things. Perceptions of the imagination arise by chance: perceptions from hearsay (such knowledge as of my birthday and of the persons who are my parents) are wholly uncontrolled — all setting of signs and symbols is of this type; perceptions from vague experience (such as that I shall die inasmuch as my equals have died, that water extinguishes a flame and that oil feeds it, that a dog is a barking animal and man a rational animal, in fact nearly all things that are useful in life) arise from experience which is not determined by the intellect but by chance and which, if we have no experienced facts to oppose to it, it remains unchallenged in our minds. Reason concludes the essence of one thing from the essence of another. It is abstract and *a posteriori*; it either infers a cause from some effect or concludes from a general proposition that some property must be present. Since the cause is considered by reason only on the basis of our knowledge of

⁵¹ *Int. Emen.*; II, 18-19.

the effect, nothing is known of the cause save what can be concluded from the effect; the cause which reason supplies is a statement only of the inference from effect, and is a statement of it in very general terms. For example, after we perceive that we feel a certain body and no other, we conclude that a soul or mind is united to that body and that the union is the cause of the feeling. Yet though the cause of the feeling is now invoked to explain it, nothing more is known of the cause than that it is cause of that effect; what the union of body and soul is, and what the feeling of the union is, can not be understood absolutely by reason. Further there is the danger, since things are conceived abstractly and not through their essences, that they may be confused by the imagination. In this case, names like body and soul are imposed in an abstract and reasoned connection; if the names are then carried over into the imagination, the meanings are altered and it may be supposed that there are two entities, body and soul, wholly discrete and united by some accidental bond. In a word, imagination, since it arises from an accidental experience, tells only how a thing has affected us and leaves us to conclude what we can from that; reason when it proceeds carefully tells what the thing must be or what property it must have to be what it is.

Even this estimation of the ways of knowing suggests not only that reason is superior to the imagination but also that there is a kind of knowledge superior to reason. Intuition is concerned neither with the effects of other bodies on our bodies nor with concluding the essence of one thing from other essences. Intuition perceives the thing through its essence alone or through a knowledge of its proximate cause. It is deductive and *a priori*. It is not intuition in the sense of a mystic illumination, but it is knowledge concluded directly from some other idea, as existence is concluded directly from the idea of God. So too the union of the body to the mind may be known by intuition; instead of accounting for the knowledge of the body by hypothesizing a union of the body and the mind, it may be known immediately from the knowledge of the essence of the mind that it is united to the body; the proximate cause of the mind's union to the body is in its very nature and in

the nature of the attribute Thought. The superiority of the *a priori* proofs of the existence of God is in the fact that it is knowledge of this sort. Unfortunately Spinoza could find only few examples of knowledge of this sort. Truths of mathematics are intuitive. The knowledge of the union of body and mind is intuitive; so also it is by intuition that, from the fact that I know something, I know what it is to know something.

Spinoza enforced this relative rank of the ways of knowledge by the single example of the rule of three. Given three numbers, to find a fourth which is to the third as the second is to the first, one might proceed according to the operation one had learned from teachers, or one might learn the operation by experimenting with small numbers, or one might know from the proof in the *Elements* of Euclid the nature and property of proportion, or one might perceive the adequate proportionality of the given number, not from the proposition, but intuitively without any process or operation. The first, hearsay, is uncertain and from it we perceive nothing of the essence of the thing. The second, imagination, is also very uncertain and indefinite, and by it we can never perceive in things of nature anything save accidental properties which are never clearly understood unless their essences are known previously. Reason, the third, yields ideas of what the thing must be, and conclusions may be based on it without danger of error; still it is not in itself a means by which we can reach perfection. But the last, intuition, comprehends the adequate essence of the thing and is without danger of error.⁵²

The method of seeking truth depends closely on this analysis of what knowledge is. Clearly, Spinoza says, true ideas are derived only from true ideas, and the true method is the way by which they can be derived most accurately. The test must be an internal one. "That will be a good method which shows in what manner the mind must be directed according to the standard of a given true idea."⁵³ The mind as only idea of the body will itself reflect ideas; knowing the properties and the modifications of the body it will have knowledge, and its knowledge will consist in

⁵² Cf. *Eth.* II, 40, 40 scholia, 41, 42; II, 120-131 and *Int. Emen.*; II, 10-13.

⁵³ *Int. Emen.*; II, 16.

the ideas of the mind as idea; if they are true, the marks of their truth must be found in thought. The reference and criterion must be the true idea which is involved in the essence of the mind, and not anything outside the mind. The distinction which separates a true idea from a false one depends on something real in the idea. It is not a question, when the types of knowledge are compared, of relative amounts of information; it would be difficult to make them commensurate on that score. Degrees of truth and falsity correspond to degrees of reality and perfection. To know a thing by the imagination is to be acquainted with some accidental effects of it. To know the same thing by the reason is of a wholly different order: it is to know it in terms of its properties. No other sign is needed to mark a rational idea from an image than to have a rational idea—the circle of mathematics is not in any ordinary sense the circle of experience. To know the thing finally by its essence is still another sort of knowledge. The sign of truth will be in each case in the true idea; the idea is either certain in itself or implicated with and related to an idea that is certain. “To have a true idea means nothing else than to know a thing perfectly or best.”⁵⁴ To have a true idea is to have sure knowledge by the very fact that it embraces, as true idea, the whole essence of the thing. Certainty is that identity of thought and essence; “certainty is nothing else than the objective essence, that is, the mode in which we feel formal essence is certainty itself. Whence it is also clear that for the certainty of truth no other sign is needed than to have a true idea.”⁵⁵ By the very nature of the mind, a person who has an adequate idea or who knows a thing truly must at the same time have an adequate idea of his knowledge; that is, he must be certain.⁵⁶

If the perfection of an idea were not taken as the mark of its truth, and if it were supposed that ideas were to be distinguished by some extrinsic mark of correspondence with their objects, a true idea would have no more reference to reality and perfection than a false one. Metaphysically,

⁵⁴ *Eth.* II, 43 sch.; II, 124.

⁵⁵ *Int. Emen.*; II, 15.

⁵⁶ *Eth.* II, 43 dem.; II, 123-124.

Spinoza takes it to be certain that a true idea will agree with its object, but the sign of its truth is not such an agreement. The form of a true idea is in the thought itself and it is to be known from the nature of the intellect and not from any circumstance that led the mind to the conception of that idea. An adequate idea is "an idea which in so far as it is considered without respect to its object, has all the properties or intrinsic marks of a true idea."⁵⁷ Moreover the truth of any idea is in the idea itself; that it may be contradicted by another idea, does not affect its truth. An idea which follows from eternal principles is true in itself and in the context of those principles; further reasoning can at most show only that the principles are at variance with other principles. "For thought is said to be true when it involves ideally (*objective*) the essence of some principle which has no cause and which is known through itself and in itself. Wherefore the form of true thought must be placed in that thought itself without relation to others; nor does it acknowledge the object for its cause but depends on the power and nature of the intellect."⁵⁸

The method both with respect to the origin of true ideas and the criterion of truth is "reflective knowledge" or the idea of an idea. "If therefore we wish to investigate the first thing of all, there must necessarily be some basis which directs our thoughts toward it. Then, inasmuch as our method is reflective knowledge, this basis which must direct our thoughts can be nothing else than the knowledge of that which constitutes the form of truth and the knowledge of the intellect and its properties and its forces. When this

⁵⁷ *Eth.* II, def. 4; II, 85.

⁵⁸ *Int. Emen.*; II, 26-27. This, it will be recognized, is almost exactly the position of the *Short Treatise*. "The clearest things of all make known both themselves and also what is false, in such manner that it would be a great folly to ask how we are to become aware of them: for since they are said to be the clearest of all, there can never be any other clearness through which they might be made clear; it follows therefore, that truth at once reveals itself and also what is false, because truth is made clear through truth, that is through itself, and through it also is falsity made clear; but falsity is never revealed and made manifest through itself. So that any one who is in possession of the truth can not doubt that he possesses it, while one who is sunk in falsity or in error can well suppose that he had got at the truth; just as some one who is dreaming can well think that he is awake, but one who is actually awake can never think that he is dreaming." *Short Treatise*, II, 15, pp. 102-3. Cf. also pp. 103-4. One person is more conscious of this truth than another because the idea of his affirmation (or denial) corresponds entirely with the nature of the thing and therefore has more perfect essence.

is acquired we shall have a basis from which we may deduce our thoughts and the way in which the intellect according to its capacity can arrive at a knowledge of eternal things, taking into consideration of course the powers of the understanding."⁵⁹ The essence of the mind is idea determined to particular circumstances: knowing the operations of its body and its own activity, it will know its own properties, and the very center of the method is the understanding of the nature and power of the mind. But since the mind understands itself better the more it understands things of nature, the method will be more perfect as the mind understands more things: it will be most perfect when it understands the most perfect being and orders all its knowledge so that it depends on that understanding. The true method must seek the ideas of things in their proper order, and since the idea agrees in all respects with its formal essence, the best method will produce all its ideas deductively from the idea which represents the origin and source of all nature.⁶⁰ The true ideas involved in its nature which were brought out by its knowledge of things, involve in turn the essence of God; as adequate ideas they are the same in themselves, in the mind that thinks them and in the mind of God. This is only to return to the important principle of the *Ethics* that ideas are true in so far as they have reference to God.⁶¹ The true method is to be directed according to the standard of a true idea; obviously the most perfect method will be the one which directs all ideas according to the standard of that most perfect idea on which they all depend.

IV

SPINOZA states specifically what practical utility the true method should have. It should afford, first, the means of distinguishing a true idea from all other perceptions and of keeping the mind free from such other perceptions; second, rules by which unknown things may be drawn up according to a certain standard; third, an order of inquiry

⁵⁹ *Int. Emen.*; II, 38.

⁶⁰ *Int. Emen.*; II, 16.

⁶¹ *Eth.* II, 32; II, 116.

to avoid useless details, and finally, the method will be perfect when we have the idea of a perfect being.⁶² Of these four practical characteristics of the true method Spinoza undertook the consideration of only the first two in the portion of the *Correction of the Understanding* which was completed.

To distinguish true ideas from false ideas there must exist in us, before all others, a true idea as the innate instrument. With the understanding of that true idea will come the understanding of the difference between it and all other perceptions. This may be stated in the formula: the basis of the method is the mind's knowledge of itself. "The mind necessarily contemplates itself when it conceives a true or adequate idea."⁶³ If it were even conceivable that the mind might know without knowing that it knew, there would be no possibility of certainty. But the mind is so constituted that it perceives objects and in that act must be aware of its perception; knowing its own operation, it must know at least as much of its own nature as is involved in the properties and operations of knowledge. Moreover, it knows itself more completely according as it knows more things, until it becomes indubitable that for the mind to be what it is, there must be an infinite and perfect substance of which all other things are modes. Obviously the nature of modes is to be explained by the substance, and things will be known better as they are seen in their derivation from substance. This, however, is only the genesis of the method. The method itself is not concerned with questions of beginnings, with the question of how we know and how we can have had ideas that are clear and distinct and therefore adequate, but takes up only the consequences of the fortunate fact that we do have clear and distinct ideas, that, namely, we can proceed in mathematical deduction to other clear and distinct ideas and we shall have no doubt of their truth. The certainty of the idea and the logical necessity by which it may follow from a principle are sufficient guarantee of the result. There is no need that one grow suspicious and test at each moment the metaphysical certainty that the order of ideas and things

⁶² *Int. Emen.*; II, 18-19.

⁶³ *Eth.* III, 48 dem.; II, 187.

is the same. In the nature of things the mind explores essences and a true idea agrees with its object and a good method produces ideas in the same order as things are produced in nature, but the test of the true idea is to be found in none of these but in the form of the idea itself. That the true idea agrees with its object is a maxim of transcendental psychology, not a guide to inquiry. The application of the method is not directly related to metaphysics; its cogency has metaphysical implications and suppositions but its rules need only regard the nature of the intellect and deduce the form of truth from that.

The consideration of method must begin, then, by showing how doubt and error are possible and what fictitious and false ideas involve. Metaphysics would explain the essence of perceptions through their proximate causes, and it would have dealt sufficiently with error when it had shown that inadequate ideas follow by the same necessity as adequate ideas. Methodology is concerned, not with the fact that adequate ideas and inadequate ideas are equally necessary, but that adequate ideas are more perfect than inadequate ideas and by their perfection are distinguishable from them. Fictitious ideas arise in two ways: they may be fictitious either in regard to the essence of things or in regard to their existence. In the case of existences, obviously a thing may be clearly conceived and it may still be a question whether or not such a thing exists. Only the essence of God and the attributes which follow directly from God involve existence necessarily; in their regard existence is an eternal truth. But in all other things, existence follows not from the nature of the thing, but from particular causes such as might bring about that the thing exist; the adequate definition of a triangle will not determine how many triangles will exist. On the other hand, fictions concerning essence arise from confused ideas of things and actions which appear separately in nature and which are brought together by the mind; notions that trees speak and that men are turned to stone are of such mixed origin. Error, however, need not come from fictions and there is no danger in feigning since the mind can always discover deductively any absurdity; quite to the contrary, if the ideas which are feigned are clear and distinct they

constitute true knowledge. Furthermore in each type of fiction whether of essence or existence, there are safeguards from error. It is impossible to construct fictions concerning the existence of eternal truths, and fictions concerning the existence of all things beside eternal truths, can be controlled by a due regard to the order of nature. Fictions concerning essences are possible only in the case of compound things; such things can be broken up into their constituent elements, and fiction is impossible concerning a simple thing.

Error arises from fictions when the mind gives its assent to the idea which was feigned. The false idea is the same as the fictitious idea, with the addition of the mind's assent. Ideas are false if there is involved in them no cause by which the mind may gather that they are fictions and do not come from things without. Clear and distinct ideas can not be false. This, it must be reiterated, is a criterion of intellectual truth; it touches existence only in that any statement involves the existence of a necessary being. When I think, it can not be doubted that I think or that God exists; what I think may be doubted and may be false. The further test of the truth of the statement is purely intellectual and particular to it. The true idea is true because of itself and not because of anything or because of any other idea save the primitive ideas on which it is based. Falsity consists only in the assertion of something which is warranted by no conception or general principle. To repeat Spinoza's example: a simple idea, such as the simple idea of a semi-circle or a triangle, motion or quantity cannot but be true. This does not mean that the notion we have of such things must be exhaustively perfect, but that an uncompounded idea can no more be false than can a definition which is not self-contradictory. Falsity enters only when we make an assertion concerning the thing which is not warranted by the conception of the thing. Thus, from the idea only of a semi-circle there is nothing to justify the mind in affirming that the semi-circle is in motion; such an assertion is a false one. But if, in order to form the conception of a sphere a cause be feigned, such as a semi-circle revolving about its center, that idea is a true idea even though no sphere were ever formed in just that

manner. The truth of a true idea arises always from the fact that it comprehends objectively the essence of some principle which has no cause and which is known through itself and in itself. Therein lies the sufficiency of mathematical thought deduced in proper sequence from definite axioms and clearly formulated ideas.⁶⁴ Doubt therefore never arises in the mind from the thing doubted, since there could be no doubt from only one idea, but it arises from another idea which is not clear and distinct enough for us to be able to conclude anything certain concerning the idea we doubt. Thus, to use Spinoza's example again, no one who has never thought of the deception of the senses will doubt whether the sun is greater or smaller than it appears; doubt arises from thinking about the senses, and if any one after doubting, acquires a true knowledge of the senses, and of the way in which things at a distance are presented through their instrumentality, all doubt concerning them is removed.⁶⁵ True ideas can not be called into doubt, for doubt arises from the suspension of the mind concerning some affirmation or denial, due to the appearance of something which, since it is unknown, indicates that our knowledge is imperfect.

This constitutes the first part of the method, the distinguishing of true ideas from false ideas. Care must be taken with respect to the things that are learned through the imagination and with respect to the abstractions that are made from them and the words that are applied to them. These are all ideas which arise not from the power of the mind but from external causes, according as the body receives various motions. The greatest danger comes from the possibility of confusing the things of the imagination with those of the intellect, for the laws of the two are wholly different. The imagination is limited to individual and corporeal things, and if it seizes upon things proper to the intellect it will present them in special, temporal and quantitative terms. The first rule is therefore to distinguish ideas of the imagination from those of the intellect, according to the properties of each. The second part of the method is to draw up rules that unknown things may be perceived

⁶⁴ Cf. *Int. Emen.*; II, 27.

⁶⁵ *Int. Emen.*; II, 29-30.

according to a given standard. The primary rule has been seen to be that a thing should be conceived either through its essence alone or through its proximate cause. An uncreated thing must be known in its very essence; created things through their proximate causes. All the properties of the thing as it is in itself and apart from other things must follow from the conception of it if the definition is adequate. The requirements of a definition may be concluded from this: a perfect definition must explain the inmost essence of a thing. The properties of things are not understood so long as their essences are unknown. A definition of a circle which has it generated from the movement of a line of which one extremity is fixed, comprehends the proximate cause of a circle and from it all properties are to be deduced; a mere enumeration of the properties of a circle would not reveal its essence.

The transition therefore from the lower types of knowledge to the higher is a transition from less perfect conceptions to more perfect ones. Imagination is concerned with mutable and changing things; reason deals with things by inferring a cause which would explain them and therefore they are not mutable or changing as they enter the rational explanation. The question of existence does not enter in reason. "Any natural thing whatever can be conceived adequately whether it exists or not. As then the principle of existence of natural things can not be inferred from their definition, in like manner neither can their continuing to exist. For their ideal essence is the same after they have begun to exist as it was before they existed."⁶⁶ The project of science is clear from this; it consists in explaining things by definitions which will reveal the essences of these things, that is, in explaining by means of causes things that are observed. "The method of interpreting Nature consists chiefly in this—in arranging the history of Nature and concluding from it, as from certain data, the definitions of natural things."⁶⁷ If the senses are used with proper precautions, experimentation may yield the starting point of science. From the data of observation hypotheses can be formed to explain natural phenomena; such hypotheses

⁶⁶ *Polit.* cap. II, 2; III, 276.

⁶⁷ *Theo-Pol.* cap. VII; III, 98.

are true assertions despite the fact that there may be a variety of other hypotheses to explain the same movements. The nature of the heavens may be concluded from the celestial movements observed, but many other causes can be conceived for precisely the same phenomena, and therefore other hypotheses may be formed with equal certainty.⁶⁸ These are ways of determining the ideas which the understanding has absolutely. That the ideas it forms can be determined by the mind in many ways is sufficiently clear from any mathematical conception: an ellipse may be determined and defined satisfactorily in a variety of fashions. Ideas, moreover, are true when they can be related to and deduced from some idea which expresses infinity and is understood absolutely: the idea of motion is possible and adequate, considered as dependent on the idea of quantity. But once motion is perceived in the determination of quantity, the bases of the sciences of measurement are laid. Motion will supply the proximate causes by which things in mathematics and in physics can be known.

When, however, the method of knowing is arranged in its proper order, it must be an order which will conduct to the individual things of experience from the eternal things which are their causes. The process to be perfect should not be content only with tracing the phenomena of experiments back to some hypothesized cause — this is the manner of reason and while the results are adequate and indubitable, it does not yield the highest and most complete knowledge; by means of the intellect we begin with the objective essence of some attribute of God and deduce our ideas “from physical things or from real entities, proceeding, as far as possible, according to the series of causes from one real entity to another, and in such a manner that we never pass over to abstractions and universals, either in order to conclude anything real from them or to conclude them from anything real; for either of these interrupt the true progress of the intellect. But it must be noted that I do not understand here by the series of causes and real entities, the series of individual mutable things, but only the series of fixed and eternal things. For it would be impossible for human weaknesses to follow up the series of individual

⁶⁸ *Int. Emen.*; II, 22, note y.

things, as much on account of their multitude surpassing all number, as on account of the infinite circumstances in one and the same thing of which each may be the cause that it exist or not. For indeed their existence has no connection with their essence, or (as we have said) it is not an eternal truth. However, there is no need that we should understand their series, for the essences of individual mutable things are not drawn from their series or from the order of existence, which could afford us nothing save their extrinsic denominations, relations, or at the most their circumstances, which are far removed from the inmost essence of things. But this is only to be sought from fixed and eternal things, and from the laws inscribed in those things as in their true codes, according to which all individual mutable things are made and ordered: indeed, these individual and mutable things depend so intimately and essentially (so to speak) on these fixed things that without them they can neither be nor be conceived. Whence, these fixed and eternal things although they are individual, yet on account of their presence everywhere and their very widespread power, will be to us like universals or kinds of definitions of individual mutable things, and the proximate causes of all things."⁶⁹

This statement of order and method is the statement explicitly of the aim of Spinoza's philosophy. If any problem arise, if, for example, it is asked how the passions are to be known and controlled that man may reach his highest perfection, there is clearly a question for the understanding and reason to elucidate. Imagination and experience would be sufficient to reveal that such things as passions exist and statistical studies or historical and laboratory sketches of them could be drawn up without leaving the realm of the imagination or corporeal things. Reason could explain any given passion by assigning a cause for it; notions of attraction and repulsion would be a sufficient foundation for a science of psychology as for a science of physics. But for the complete understanding of the passions it is necessary to know God, his attributes and the fashion in which *naturæ naturatæ* proceed from them; only then will the nature of the soul and its union with the body be known, and

⁶⁹ *Int. Emen.*; II, 36-37.

then the nature of any passion can be explained by its proximate cause, and the means to control it may be adumbrated. It is important to remark once more that the history of the man up to the moment of the passion is irrelevant, that in fact to speak even of the moment of the passion is inaccurate; the cause of the passion so far as the intellect is concerned, is not what happened to the man, but what the nature of his mind is and how it is dependent on Thought and on the body. This is no slighting of individual mutable things, nor a judgment passed on them to make them appearances opposed to a reality. It is a statement only that they do not enter into the consideration of the intellect. That men may be induced to love is irrelevant to the explanation of love; to insist that the empirics of psychology be introduced into the explanation of the emotions would be tantamount to demanding that geometry be supplemented with some practical tables, devoted to the measurement of triangles and circles which have entered into the experience of the geometer. "Experience teaches us no essences of things, but the most it can do is determine our mind to think only concerning certain essences of things."⁷⁰ What is to be explained is not what caused a thing of a particular nature to exist, but what the eternal things are on which its nature depends. Spinoza seeks consistently to know what the nature of the world must be in which the things that exist should be possible and necessary, rather than to know the infinite history of particular causes which have wound from the distant past down to the production of just this thing. Apart from the fact that knowledge of the total sequence of mutable causes is in the nature of things impossible, even if it could be encompassed, it would not explain the nature of the results, but would account only for their occurrence.

The best method, then, will reflect nature as far as possible; it will begin with the objective essence of God and order all its ideas so that they will proceed from God. Its basis will be nothing outside the mind, but knowledge only of the nature of the mind and how it operates. It is reflective knowledge; if the understanding did not possess a clear knowledge of its own knowing, it would be able to

⁷⁰ *Epistola X (olim 28) to de Vries; IV, 43.*

understand nothing. Knowing anything, it knows itself and God, and adequate knowledge is then in its power. The one thing which makes this knowledge the system of true knowledge is the union which is thus discovered between ideas and eternal things and the further union, which is implicated in it, between ideas and things. It is possible as a result of the interconnections and interdependences which are thus indicated, to know that knowledge, though it is intellectual in its essence, implicates a reality and perfection, and it is possible, further, to find meanings involved in experience and in changing things — to explain a book, for example, not only in terms of the series of copies by which it has come to us but in terms of the ideas and meanings which it states, and to explain events, not only by the series of causes that stretch infinitely, but by the series of eternal causes which are determined by intelligible things. The whole possibility of knowledge is here, and that possibility is precisely the means which are needed for the solution of the ethical problem. Man's greatest good is the "knowledge of the union which the mind has with the whole of nature."⁷¹

⁷¹ *Int. Emen.*; II, 8.

CHAPTER III

THE PASSIONS

I

THE possibility of a metaphysics in the spinozistic philosophy turns on a slight, and therefore highly significant, point. If thinking could be conceived which did not reveal and know itself, there would be no grounds or opportunity for knowing God. Speculation concerning the nature of things, if such were the case, would share the relativity of all speculation: by the supposition we should have no knowledge of the whole of things, and still the truth of anything would depend on and follow from our conception of the whole. Spinoza discovered the foundations of a metaphysics in the fact that the mind knowing its own modifications and the modifications of its body, comes to know one essence which alone of all the essences it treats, involves necessary, and not merely possible, existence. Spinoza's fundamental conviction concerning human knowledge is that the rationality of the mind is grounded in reality, and therefore the mind's self-knowledge makes into a metaphysics what might in another system have been a logic or a dialectic. Even if this were not so, God would be known, of course, inductively as the cause, hypothesized by reason, of every process; but the possibility of knowing him directly, and therefore the possibility of the true philosophy which is to deduce all things from his essence, arises from the fact that the mind knows its own processes and operations. Transient and uncertain intelligences, as soon as they are examined, must acknowledge as their eminent cause eternal and changeless things; God as thought is implicated in thinking. Or stated in other terms, a logic even though it deals avowedly with essences and not with existences, must reveal the existence of at least the conditions

of inference and the necessity by which conclusions follow from principles. Those conditions are the conditions of being, and therefore, not the existence of that of which the mind thinks, but the existence of God follows from the fact of thinking.

In view of these circumstances, the further relevance of a knowledge of God to knowledge of all other things need scarcely be stressed. The cause of the human mind is the intellect of God, and in turn the mind is cause of what follows from its nature. To understand human knowledge, the nature of the mind must first be known, and the mind can be understood adequately only in its dependence on God. But the emotions and passions follow as necessarily from the nature of the mind, as do reason and understanding. Moreover, the emotions follow from precisely the same circumstances as the rational processes: an idea in the mind and an emotion attached to that idea are not different things. It has been seen, finally, that the logic which seeks the adequate grounds for a conception, goes to the proximate cause from which the idea can be seen to flow as a consequence. What the mind thinks is true, provided either that the idea is a simple notion or that its proximate cause can be known in itself and can be made to depend on a principle which is known in itself; in either case its essence is included in the essence of God, and that essence involves supreme reality and existence. It is important now that this dependence of a thing on God, even in its most intellectualist sense, is not a static relation; all things flow from him as the inevitable results of a perfect causation. To conceive God at all one must conceive him as being; to conceive him as not acting would be an impossibility of the same order as to conceive him as not being.¹ True ideas depend upon an actual sequence of things from God. That sequence is of course formal and objective, and therefore does not take place in time: the things involved are eternal things. But God's power is the same as his essence and whatever is in his power is necessarily.² God's intellect is the one cause from which all things flow, and from it all things flow necessarily and in a necessary se-

¹ *Eth.* II, 3, sch.; II, 87.

² *Eth.* I, 34 and 35; II, 76, 77.

quence. Therefore, it is by that intelligible necessity too that all things which exist do so necessarily and all things which do not are impossible. Consequently just as the distinctions and paradoxes of knowledge are found in the discovery, and in the place of, essence in the flow of existence, so too from the same source arise the peculiarities of the emotions as well as the possibility of controlling them.

The materials, consequently, with which Book III of the *Ethics* approaches the examination of the nature of the passions are the same as were discovered in Book II to be implicated in the nature of the mind. This is not surprising, since Book II closed with the statement that the knowledge of "the nature and properties of the human mind" is to be made the basis of the excellent conclusions that are later to be drawn. The nature and origin of the mind were determined in the fact that the mind, since it involves the nature of the body, knows the particular things which influence the manner in which the body will exist, and knows also the eternal things from which its essence proceeds. Emotions must follow from the fact that neither type of knowledge would be possible if the mind were in a static relation with the causes of its knowledge: consequences follow in an empirically determinable way from acts done or suffered; and properties and acts follow by a logical necessity from essence. The essence of a thing which exists is not merely that which constitutes it the thing it is and leads to its being conceived as it is; obviously for it to be that thing in any temporal sense, its essence must also give it a force to persist in existence. "Though each thing is determined by some other individual thing to exist in a certain manner, yet the force by which each of them persists in existing follows from the eternal necessity of the nature of God."³ The constitution of a thing will determine what acts it can perform; its acting is determined by its nature and it can do only the things which follow necessarily from its nature. But it must act to exist; nothing exists from whose nature some effect does not follow.⁴ The essence of a thing, then, is inseparably bound not only in the being and in the conception of the thing, but also in its

³ *Eth.* II, 45, sch.; II, 127.

⁴ *Eth.* I, 36; II, 77.

continuance in being. "The endeavor by which each thing tries to persist in its being is nothing else than the actual essence of that thing."⁵ The essence is an intelligible and constitutive principle, but to be that, it must be an active principle in a world dynamically evolved from God. Each thing will be set according to its essence; if the essence is of an actually existing thing, it will be pliable, within the limits set by its essence, to the actions that affect it; ultimately if it is to resist thorough changes it must have its stolidity to resist from its essence.

The treatment of the passions must proceed then to draw the consequences and peculiarities of the presence of changeless principles in a world that is changing. The nature of human knowledge was determined by the mind's double awareness of the modifications of its own body and of the essence of God. It was a question not of the empirical process of human thinking nor on the other hand of the references set in an absolute logic or in the intelligibility of things, but rather it was a question of a finite mind finding in itself some of the consequences of an infinite intelligibility. The determining conditions which the mind found in thinking are the same as those to be examined now in the particular existence of man: he has a power for existing and he is surrounded by things which have the strength to limit and determine the manner in which he will exist. The mind in knowing was sometimes dependent on itself alone, sometimes it was passive to external impressions; in actions the force by which man exists and operates proceeds from his own nature, but modifications are wrought upon him also from without. In either case, in knowledge or in action, the processes carry back to changeless principles which are involved. This may be expressed by saying that "the power of natural things by which they exist and consequently by which they operate can be no other than the eternal power of God himself."⁶ Change, that is, involves not merely the thing in transition, but also, if there is regularity and intelligibility in change, the principle of the transition. For transitory things to act they must proceed according to the changeless prescriptions in which they find

⁵ *Eth.* III, 7; II, 146.

⁶ *Polit.* cap. II, 2; III, 276.

themselves. Any existent thing involves an essence; essences are changeless and changes occur rather according to them than in them. Consequently to modify a thing or to change it in any essential sense is, as it were, to jolt it loose from its essence; the very fact of existence is indication of a disposition in the thing to persist in existence. This, again is to say that God is not only the cause of the existence of things, but of their continuance in existence. "God is the cause of modes, not only in so far as they exist simply, but also in so far as they are considered as determined for the doing of anything. . . . All things are determined by the necessity of the divine nature, not only for existing but for existing and working after a certain fashion."⁷ God, in the face he presents to the world of finite things, is a greater system of laws, like the laws of motion; God is implicated in the essence and therefore in the action of each thing, which, so far as it is considered in itself alone, endeavors to persist in its own being.⁸

All of this background is involved in the intention Spinoza stated, namely, to treat the emotions through their first causes as he has already treated the mind. This is the natural consequence of his conception of philosophic method as well as a further development of his view of the intelligible nature of things: all modifications and changes occur according to the same rules and laws of nature, and consequently there should be a single manner of understanding the nature of all things, that is, by means of those universal rules and laws.⁹ The method of human knowledge was finally understood on the basis of the mind's understanding of its own properties and powers. The analysis of the emotions, beginning with the nature of the mind and of knowledge, proceeds further along the proximate causes that lead out from God. The idea which constitutes the essence of the mind involves the actual existence of the body; but the power and endeavor of the body to exist is the very essence of the body, and so the endeavor and power of the mind is the essence of the mind.¹⁰ The mind therefore like the

⁷ *Eth.* I, 29, dem.; II, 70-71. See too *Eth.* I, 32 cor. II; II, 73.

⁸ Cf. *Eth.* III, 6; II, 146.

⁹ *Eth.* III, *Præf.*; II, 138.

¹⁰ *Eth.* III, 54, dem.; II, 182.

body endeavors to persist in its being and to resist all change that is forced upon it. Since this endeavor proceeds from its essence it is not limited in time. "The mind in so far as it has both clear and distinct ideas and confused ones, endeavors to persist in its being for an indefinite time and is conscious of its endeavor."¹¹ But since furthermore the essence of the mind involves the actual existence of its body, it must, to preserve its existence, assert the existence of the body. All its knowledge is bound up in some way with the body: knowledge of particular things, knowledge of memory and imagination, proceed directly from the nature and powers of the body; intellectual knowledge in any particular biography depends on the existence of the body, though in nature it depends on eternal things and on no particular existing things. It is interesting to observe consequently that just as the origin of the mind is intellectual and follows only in that the idea of an existent body is present in the attribute of thought, so too the end of the mind, the conclusion of its present existence and power of imagining, is intellectual and consists in an idea presented to the mind, now conscious of itself, which cuts off the present existence of the body. Since the first thing which forms the essence of the mind is the idea of the body actually existing, the first and principal endeavor of the mind is to affirm the existence of the body. The mind did not begin to assert the existence of the body because the body began to exist; the cause by which the mind is led to cease to affirm the existence of the body is not that the body ceases in fact to exist; neither can it be anything in the mind itself. That which cuts off the existence it asserts of the body and which cuts off consequently the existence of the mind must be an idea contrary to the idea which constitutes the essence of the mind.¹² Such an idea is obviously not among the essences and eternal things, but in the flow of nature. The essence of the body is not a substance; it is constituted by a certain proportion of motion and rest; to alter that ratio is to destroy the body. "I understand the body to suffer death when its parts are so disposed that they assume another pro-

¹¹ *Eth.* III, 9; II, 147.

¹² *Eth.* III, 10 and 11, sch.; II, 148-149.

portion of motion and rest one with the other.”¹³ Death need not bring the dissolution of the body; there can be death while the body is not a corpse. The spanish poet who after a sickness forgot his past life and all the poetic works he had written and who lived almost like a child, could scarcely be called the same man; in a significant sense he had died. Each person as he grows from childhood to age dies many deaths, and changes so completely that only our knowledge of the lives of others could convince us that we also must once have been children.

Both body and mind, then, act in the flow of finite things as they are determined to by their essences. In fact in their alterations in action or in suffering actions, the modifications they undergo follow precisely the same order. It has been seen that the mind knows the changes that are worked in the body; its inclination is related to the disposition of the body to act as invariantly and as closely as its knowledge is related to the changes that occur in the body. “The decision of the mind and the desire and determination of the body are simultaneous in nature, or rather they are one and the same thing, which when considered under the attribute of thought and explained through it, is called a decision and when considered under the attribute of extension and deduced from the laws of motion and rest, is called a determination.”¹⁴ The disposition of the human being to act and the necessity that he suffer certain things are to be explained by the same parallel conditions of body and mind by which the nature of knowledge was elucidated.

II

It is possible, therefore, since the same modifications appear in thought as well as in body, to take up and to explain by their manifestations in the mind alone all the modifications man undergoes. In terms of the mind there is one fundamental distinction to be made: in so far as the mind has adequate ideas it necessarily acts certain things, and in so far as

¹³ *Eth.* IV, 39, sch.; II, 240.

¹⁴ *Eth.* III, 2, sch.; II, 144.

it has inadequate ideas, thus far it necessarily suffers certain things.¹⁵ Actions, therefore, require for their explanation only the nature of the mind; the passions vary according to the things that caused them and therefore vary independently of the nature of the mind. "I say that we act when something takes place within us or outside us of which we are the adequate cause, that is, when anything follows from our nature, within us or outside us, which can be clearly and distinctly understood through that alone. On the other hand I say that we suffer or are passive when something takes place in us of which we are only the partial cause."¹⁶ The decisions of the mind flow as necessarily from the ideas of the mind as results flow from their causes. The logical necessity by which decisions follow from ideas is the same as the necessity by which it follows from the nature of a triangle that the sum of its three angles is equal to two right angles. In fact, the only volitions and affirmations that the mind involves are such logical consequences; as in the case of the triangle the decision and the idea are always indissolubly bound: the affirmation can obviously neither be or be conceived without the triangle, and whenever the idea of the triangle is present it must involve the affirmation. The conditions, therefore, which lead to our decisions and our emotions are the same as those which cause ideas to arise in us from other ideas. The decrees of the mind since they concern particular things and actions arise in the mind from the same necessity as the ideas of things actually existing. Will and intellect are the same thing, precisely because they are nothing more than the particular volitions and ideas which they respectively comprise; and ideas and volitions are the same.¹⁷

To imagine, in view of this, that any action is performed by a free decision of the mind is to neglect the nature of volition. There is no absolute or free will, but the mind is determined in each of its decisions and volitions by the endless sequence of causes. There is nevertheless a significant sense in which human freedom can be spoken of — not in the sense of causeless whims but of actions which are de-

¹⁵ *Eth.* III, 1; II, 140.

¹⁶ *Eth.* III, def. II; II, 139.

¹⁷ *Eth.* II, 49 and cor. Also *Eth.* III, 2 sch.; II, 130, 131, 141.

terminated by the nature and essence of the actor and not by chance circumstances. "No one can deny that man, like other individual beings, strives as much as he can to preserve his being. For if any distinction could be conceived on this point, it would have to arise from man's having a free will. But the freer we conceive man to be, the more we would be forced to maintain that he must of necessity preserve himself and be in possession of his senses, as anyone will easily grant me who does not confound liberty with contingency. For liberty is a power or perfection; whatever, therefore, convicts man of weakness can not be ascribed to his liberty. And so man can by no means be called free because he is able not to exist or not to use his reason, but only in so far as he has the power of existing and operating according to the laws of human nature. The more therefore we consider a man to be free, the less we can say that he is able not to use reason or to choose evil in preference to good; and therefore God, who exists, understands and operates absolutely freely, necessarily, that is according to the necessity of his own nature, exists, understands and operates. For there is no doubt that God operates by the same liberty as that by which he exists. As then he exists by the necessity of his own nature, by the necessity also of his own nature he acts, that is, he acts with absolute freedom."¹⁸ Human freedom depends on the nature of the human mind; knowledge of its powers and operation according to them will constitute the foundation of its perfection. This is the sense in which the investigations of the Second Book of the *Ethics* have been made to "lead us as if by the hand to the understanding of its highest blessedness."¹⁹ For human freedom is "a firm reality which our understanding acquires through direct union with God, so that it can bring forth ideas in itself and effects outside itself in complete harmony with its nature; without however its effects being subjected to external causes, so as to be capable of being changed or transformed by them."²⁰

From the very possibility of alteration and transformation, however, there appears the necessary consequence that

¹⁸ *Polit.* II, 7; III, 278-279.

¹⁹ *Eth.* II, *Præf.*; II, 84.

²⁰ *Short Treatise*, II, 26, pp. 148-149.

alterations will be for the better or for the worse. The purely objective standards of essence or even the more complex ones of existence, which sufficed for all the problems concerned with truth and falsity, will not serve for the consequences which follow from an idea in action. Such consequences are good or bad, not true or false; the estimation of them depends on whether or not the endeavor which constitutes the essence of the soul has been furthered or hindered. Since the essence of the soul is primarily to assert the existence of its body, the good is primarily whatever fosters the existence of the body. "Whatever is able to preserve the proportion of motion and rest which the parts of the human body bear to each other is good, and on the contrary, that is evil which causes the parts of the body to have a different proportion of motion and rest to each other."²¹ The mind will be preserved by the idea of that which preserves the existence of the body. But it is a question not only of continuing the existence of the human body and mind, but further of increasing their power; in power of action the body and mind undergo identical and simultaneous alterations. "If anything increases or diminishes, helps or hinders the body's power of action, the idea of that thing increases or diminishes, helps or hinders the power of thinking of our mind."²² The order of actions and passions of our body is simultaneous in nature with the order of the actions and passions of our mind. The good is that which will preserve the body and mind in existence and advance their power of action. Since it increases the power of man in action, that which is good is manifested by the heightened perfection it effects in him. For perfection is the same as reality and is judged by the nature and power of the being that possesses it; since the reality of man is set by his essence, and his essence consists in a continued striving to preserve his being, the perfection of man can be measured by his actions. "By perfection in general I shall understand reality, that is, the essence of anything in so far as it exists and operates in a certain manner, with no consideration of its duration."²³

²¹ *Eth.* IV, 39; II, 239.

²² *Eth.* III, 11; II, 148.

²³ *Eth.* IV, *Præf.*; II, 209. Cf. *Eth.* I, App. and *Eth.* II, def. 6; II, 83, 85.

Spinoza would have all ethical judgments and estimations consist in the measuring of respective perfections. What advances the perfection of a thing is good for that thing; but the perfection of the thing, in turn, which confers the benefit and is good, should be judged only in itself and not in the fact that it has been pleasant or beneficial. The perfection of each thing consists in its nature and power, so that in an absolute sense there is no imperfection in the world. Greater and less perfection can be spoken of only by virtue of a comparison which reason makes, not by virtue of the nature of things and the way in which things flow out of God. "Therefore perfection and imperfection are in truth only modes of thinking, namely notions, which we are accustomed to construct because we compare individuals of the same species or genus with each other. And for that reason I said that I understood the same thing by reality and perfection. For we are accustomed to refer all individuals of nature to one class which we call most general, namely to the notion of being which appertains absolutely to all individuals of nature. In so far as we refer the individuals of nature to this one class and compare them with each other, and find that some have more being or reality than others, thus far we say that some are more perfect than others . . . I shall understand by good in what follows that which we certainly know to be a means to our attaining more and more to that type of human nature which we have set before us; by evil, that which we know certainly prevents us from attaining to it."²⁴ Good and evil indicate nothing positive in the things considered in themselves, but from the comparison of things with each other we form certain notions of what the things should be.

The conception of good and evil, therefore, takes on the neoplatonic aspect which had become inseparable from it in scholastic thought. Evil is nothing at all, only the absence of some property which was judged part of the nature of the thing; it is nothing actual but privation. The world as it emerges from God is good, and its perfection requires the graduated series of perfections from him to finite things. The assertion of imperfection of any part is only the judgment that the thing might have been other than it

²⁴ *Eth.* IV, *Præf.*; II, 207-208.

is; its lack of some quality is evil. "Privation is not the act of depriving, but only a pure and simple lack, which is in itself nothing: it is only a thing of the reason (*ens rationis*), or a mode of thinking, which we form by comparing things with each other. We say, for example, that a blind man is deprived of sight because we readily imagine him seeing, or else the imagination comes from this, that we compare him with others who see, or that we compare his present condition with his past condition when he could see. When we consider a man in this way, comparing his nature with the nature of others or with his own past nature, we affirm then that sight belongs to his nature and we say therefore that he has been deprived of it. But when we consider the decree of God and his nature, we can no more affirm of that man than of a stone that he has been deprived of sight, for at that time sight is no more in the power of the man without contradiction than of the stone, since nothing more belongs to that man and forms part of him than the divine intellect and will attribute to him. And therefore God is no more the cause of the blind man not seeing than he is of the stone not seeing; it is pure negation. So also when we consider the nature of the man who is led by lustful desire and we compare his present desire with that which good men have or with that which he had himself at some other time, we assert then that he is deprived of the better desire, because we conceive the virtuous desire to lie within the scope of his nature. This we can not do if we regard the nature of the divine decree and intellect, for regarded thus the better desire pertains no more to the nature of that man at that time than to the nature of the devil or to that of a stone; and in that respect the better desire is not a privation but a negation."²⁵

Good and evil, beauty and deformity, order and confusion are all convenient constructions which the mind has built from what it has seen of the many things that occur about it. That they are things of the reason should not suggest that they are useless or erroneous estimations and therefore to be avoided, but that, being relative to us, they are highly variable and inconstant. They indicate, like the imagination from which they arise, rather the action of

²⁵ *Epistola XXI* (olim 34) to Blyenbergh; IV, 128-129.

things on us than the essence of the things in themselves. Consequently just as one and the same thing could have different effects as it acted on different bodies, so too one and the same thing can be at the same time good, bad and indifferent, as music is good for the melancholy, bad for those who mourn, and neither good nor bad to the deaf. This, then, is the origin of the emotions — in a metaphysical sense susceptible of statement in intellectual terms and a fitting sequence therefore to the consideration of Book I and II of the *Ethics*. The body acts and suffers actions to be done to it; its abilities to act further are increased and diminished in action and passion. Its essence therefore, that which is and which is conceived invariably with the object and on which its being and conception depend, is also endeavor and desire; from the presence of desire and appetite in the world all the emotions can be deduced. "Desire is the very essence or nature of every one in so far as he is considered to be determined from any given disposition of it to do anything."²⁶ Good and evil therefore, tend to be estimated according to desire; we do not desire a thing because it is good, but rather call it good, because we desire it. The problem of ethics in these terms carried over from metaphysics is to differentiate those things which really advance the power of man in action from those which do not. As in the problem of knowledge, such a differentiation is possible by observing what man does by his own power and what is forced upon him. No harm can come to the body or the mind except from external sources, and the perfection of body and mind is forwarded consistently so long as they act by their own power. "Because all these things of which man is the efficient cause are necessarily good, no evil can happen to man save from external causes, in so far, that is, as he is a part of the whole of nature whose laws human nature is compelled to obey and to which it is compelled to accommodate itself in an almost infinite number of ways."²⁷

The actions and passions of the mind consequently depend intimately on what the mind knows and how it knows. Actions and passions of the mind are modes of thinking which are possible only through the idea of the thing to-

²⁶ *Eth.* III, 56 dem.; II, 185.

²⁷ *Eth.* IV, App. VI; II, 267.

ward which the action is directed or by which the passion is induced. Knowledge is the mind's cognizance of the modifications or of the properties of the body; the passions and actions of the mind are its recognition of the transition to a greater or to a lesser perfection which the body undergoes in its modifications. Ethical virtues are therefore to be marked in the same categories as the kinds of knowledge. The passions are the consequences of inadequate ideas; the actions depend only on adequate ideas. We are necessarily passive when we imagine, but we are active in so far as we have the adequate ideas of reason and intuition.²⁸ There is an intellectual inaccuracy to correspond to every ethical frustration. The correction of errors will be relevant to the control of passions and the greatest ethical perfection as well as the highest intellectual attainment will be in the consciousness of the mind's own perfect activity "combined with God as its cause."

III

ALL this may be viewed in the light of propædeutics and necessary background to the deduction of the passions. The actual deduction of the passions is the culmination and the most complete exemplification that Spinoza's method was to receive in his hands. Its success as a method is witnessed by the acclaim which even those who have little sympathy with its metaphysical implications have thought safe in regard to this product of it. Such approval may be taken to indicate that the deduction from the single idea of the being which is the origin of all things, comes eventually to specific conclusions which are recognizable in experience. If Spinoza was right in speaking of this as the method of philosophizing, it is slight compliment to the general philosophic temper of mankind that his critics should be most nearly in accord with him on points in which the basis of agreement would be in experience and imagination, and that they should show least readiness to follow in matters in which reason alone leads the way. Yet it must be insisted that it is only the mathematical and deductive cogency that

²⁸ Cf. *Eth.* III, 3 and 56 dem.; II, 144, 184-185.

Spinoza recognized in this treatment of the passions; there is nothing which could be contributed to that cogency by the fact that the experience of mankind bore out the analysis. The origin of the passions and of the actions of mankind is nowhere in the history of the race, but in the nature of God and of the world that is derived from him; it is inevitable that the experience of mankind agree with the conclusions of philosophy, but the truth of philosophy is not dependent on that agreement. The nature of the emotions is determined in the proximate causes set in eternal things; the actions and passions arise from the relations which the idea of a changing body will have with ideas of other bodies and with eternal ideas. The rest is pure deduction. Even the ultimate definitions of the emotions with which Book III of the *Ethics* closes are related to actual feelings not otherwise than the circles of geometry are related to wheels and coins.

It has been seen that desire is the very essence of man in so far as he is conceived to do something by a modification of himself. All the emotions are derived from that primary one which is the essence of the soul. The deduction is concerned with working out all the alterations which occur in emotions as they vary in different souls and in the presence of different things.²⁹ Passion consequently, "emotion, which is a passiveness of the soul (*pathema animi*)" can be defined as "a confused idea by which the mind affirms a greater or less power of existing of its body or of any part of it than before, and which being granted the mind is thereby determined to think of one thing rather than of another."³⁰ As the object is changed, as ideas are associated, as emotions are themselves combined, as they are modified in time, as they are transferred by imitation, or as the person is changed, in terms of any such alteration the emotion varies. The geometry of the passions is to calculate the laws of those variations. First, as desires are furthered or thwarted, two diverse emotions are discerned, so that there are three primary emotions, *pleasure*, *pain* and *desire*. Pleasure and pain "are desire itself, or appetite, in so far as it is increased or diminished, helped or hindered

²⁹ Cf. *Eth.* III, 56 and 57; II, 184, 186.

³⁰ *Eth.* III, *Aff. Gen. Def.*; II, 203.

by external causes, that is, they are the nature of every one.”³¹ Pleasure is the passion by which the mind passes to a higher state of perfection, and pain the passion by which it passes to a lower.³² What has been said of good and evil can therefore be expressed in terms of pleasure and pain; “in so far as we perceive anything to affect us with pleasure or pain, we call it good or evil; and therefore the knowledge of good and evil is nothing else than the idea of pleasure or pain which follows necessarily from the emotion itself of pleasure or pain.”³³ At first sight such statements would seem to require that the ethical problem be formulated in hedonistic terms rather than in the terms Aristotle used to state it: virtue must clearly consist here, not in feeling pleasure and pain at the right time and for the right reasons, but in seeking pleasure and avoiding pain. But such a criticism would require the addition that the right things of Aristotle are in this statement, since they are those which advance the perfection of man’s power to act, and that pleasure is the sign to indicate right things.

From the three primary emotions *love* and *hatred* follow naturally, since love is pleasure accompanied by the idea of an external cause, and hatred pain accompanied by the idea of an external cause. The tendency of the mind is further indicated in the statement that it will endeavor as much as it can to imagine things which it loves, that is, things which increase or help its power of acting, and on the contrary to imagine things which will cut off the existence of their opposites.³⁴ Consequently we shall do all we can to promote the being of everything that we imagine is conducive to pleasure; and we shall remove or destroy what we find conducive to pain.³⁵ Moreover since these emotions are expressions of the essence of the person they will continue indefinitely till they are opposed by a contrary idea. Love continues so long as the object loved still causes pleasure; but that is to say that love disappears (just as hatred is destroyed or diminished) when the person loved (or hated)

³¹ *Eth.* III, 57 dem.; II, 186.

³² *Eth.* III, 11 sch. and *Aff. Def.* 2 and 3; II, 148-149, 191.

³³ *Eth.* IV, 8 dem.; II, 215.

³⁴ Cf. *Eth.* III, 13 sch. and *Aff. Def.* 6 and 7, also *Eth.* III, 12 and 13; II, 151; 192, 193; 150.

³⁵ *Eth.* III, 28; II, 161.

is seen to be only the partial cause or not at all the cause of the pleasure (or pain). Furthermore they will be greater, other things being equal, toward a thing which is imagined to operate freely and not necessarily.³⁶

The activities of the mind itself will lead to an association of ideas; emotions may arise because of similarities in the objects of the emotions and because of the associations established between their ideas. The emotion aroused by one thing moreover, may become attached to another, not only if it is similar to the first, but if it occurred in the experience of the person at the same time. There is also an association, as it were, of emotions: an emotion which occurred at the same time as another emotion may be aroused by only the recurrence of the first emotion.³⁷ A thing may therefore be accidentally the cause of pleasure or pain or desire; it is *sympathy* if we love a thing without any known cause, and *antipathy* if we hate it in the same fashion. Again since a thing may cause us pleasure because of its similarity to something that pleases us, it can become the object of love because it is like an object we once loved; it can be hated if it is like one that caused us pain. It is possible furthermore for the transferred emotion to be spread over a whole class of people or a nation, so that we love or hate them all because of the pleasure or pain that one person caused us.³⁸ Since both types of association operate, there is an accumulation and complication of emotions. Pleasures and pains are seldom isolated and pure, and since the same object may be pleasant and painful at the same time for different reasons, there may be a wavering of the mind (*animi fluctatio*). We may love an object for one reason and hate it for another, either because of some association of ideas and emotions in us or only because there is sufficient variety of elements in human nature to permit contradictory emotions. Wavering of the mind is a state equivalent to and aroused by the same circumstances as doubt.³⁹

There are further differentiations among the emotions by virtue of the fact that they deal with things in time. The body is affected in the same way by the image of a thing

³⁶ *Eth.* III, 48 and 49; II, 176, 177.

³⁷ *Eth.* III, 15 and sch. and 14; II, 151, 152.

³⁸ *Eth.* III, 16 and 46; II, 152-153, 175.

³⁹ Cf. *Eth.* III, 17 and sch.; II, 153-154.

whether the thing be present, past or future, consequently emotions occur concerning things past and future as they do concerning things present. But when the imagination considers past or future things, it considers them as contingent, and therefore it wavers. There is the same wavering in the emotions to follow that consideration: *hope* is an inconstant pleasure arisen from the image of a thing future or past of whose event we are in doubt; *fear* is an inconstant sadness arisen from the image of a doubtful thing. Hope becomes *confidence* if doubt is removed, and fear becomes *despair*. Joy is pleasure concerned with a past thing of whose event we were in doubt, and *disappointment* is pain in similar circumstances.⁴⁰ Furthermore things are desired if they are recalled to have been desirable. A person who recalls something he once enjoyed will wish to possess it again and under identical circumstances. Finally the rules of association apply among pleasures that are attached to past and future things just as they do to things that are imagined as present; therefore anything can be the cause of hope, fear and the other emotions accidentally.⁴¹

Besides the association of emotions and ideas, emotions may arise according to principle of reciprocity. We love things that cause us pleasure, but further, we will rejoice if the thing we love be preserved or if it be affected with pleasure, and we will love whatever caused the pleasure; that love is the emotion of *favor*. On the contrary, if what we love is destroyed we are saddened and if it is pained, we too are saddened and in the same proportion; we shall hate that which caused the pain; this is *indignation*.⁴² The contrary holds if what we hate be destroyed or even only injured; we are then rejoiced in the degree that it is injured, and we love that which causes the pain. So too if what we hate be affected with pleasure we are saddened, and we hate that which caused the pleasure. These emotions have reference to *envy*.⁴³ The original endeavor of the mind therefore to affirm its own being is extended to the affirmation, concerning ourselves and those we love, of all

⁴⁰ *Eth.* III, 18 and sch.; II, 154, 155. Also *Eth.* II, 44 and sch.; 125-6. And *Eth.* III, *Aff. Def.* 12, 13, 14, 15, 16, 17; II, 194-195.

⁴¹ *Eth.* II, 36 and 50; II, 167, 177.

⁴² *Eth.* III, 19, 21 and 22 and sch.; II, 155, 156, 157.

⁴³ *Eth.* III, 20, 23, 24 and sch.; II, 156, 157, 158.

the things which we imagine will bring pleasure to us and the denial of all things which will bring us pain. This is supplemented by the tendency to affirm concerning the things we hate all that will bring them pain and to deny all that may cause them pleasure.⁴⁴ These tendencies may lead to extremes: *pride* is to think too highly of oneself, *dejection* to think too lowly; *partiality* is to think too highly of some other and *disdain* to think too lowly of him.

Emotions are still further increased, generated and transformed by imitation. We imitate the emotions of things we imagine to be like ourselves; if a thing is like us, even if we have regarded it without emotion, we shall be affected by an emotion similar to the one it has. This is *compassion* if a pain is imitated; *emulation* if desire is involved.⁴⁵ If the thing happens to be the one we love and the emotion in question its love for us, reciprocity will be mixed in the imitation: the greater its emotion for us, the greater our *vain-glory* will be. Hatred too will be increased by reciprocal hatred and can be destroyed only by love.⁴⁶ Even if some one should love us though we have given him no cause or should hate us without cause, we shall likewise love or hate him in return. And, removing the process one step further, if a person similar to us should hate another thing similar to us which we love, we shall hate the first person.⁴⁷ The principle of the interplay of emotions is a single one and fundamentally not unlike the laws that underlie the transference of motion; the speed with which a body rebounds after contact with another will be greater or less depending on the speeds and directions of both bodies.

There is a further magnification which can be measured in the emotions: if a person imagines he has given pleasure to others, he is affected with further pleasure by the idea of himself as the cause of that pleasure; if he has caused pain he will look on himself with pain. Consequently as we consider the emotions of men, we shall tend to do whatever we imagine causes them pleasure and avoid whatever we imagine they turn from; this may be either *ambition* or

⁴⁴ *Eth.* III, 25 and 26; II, 159.

⁴⁵ *Eth.* III, 27; II, 160.

⁴⁶ *Eth.* III, 34, and 43; II, 166, 173.

⁴⁷ *Eth.* III, 40, 41 and 45; II, 171, 172, 175.

philanthropy.⁴⁸ But obviously if our efforts to cause pleasure should fail, we shall be saddened; whoever confers a benefit on another is pained if the benefit is received with ingratitude, whether he had been motivated by love or by hope of honor.⁴⁹ Hatred on the other hand may be conquered by love, and if it is completely overcome it passes into love and is greater on that account than if it had not been preceded by hatred; likewise if one begins to hate a thing which one had loved, the hatred will be greater than if it had never been loved and it will be greater in the degree that the former love was great.⁵⁰ Furthermore any emotion we have for a thing will be increased if we find that some one else shares our feeling. We shall love a thing more if some one else loves it also, and we shall desire or hate it if some one else desires or hates it. On the other hand if that which we love is avoided by others, our own emotion will waver and we shall hesitate. Here, as frequently elsewhere, the process of mathematical deduction reveals an identical basis for emotions that are commonly considered to be opposed sharply. By this imitation of the emotions "it follows from the same quality of human nature from which it follows that men are affected by pity, that they are envious and ambitious"; ambition is the desire that everyone approve what one loves and hates, while envy is the endeavor to prevent another from enjoying something which only one person can possess.⁵¹ *Jealousy* arises if the hatred of an object which was once loved be added to envy of another person who is imagined to be joined to the loved thing by some faster bond.⁵²

Emotions vary in this fashion in infinite ways — with every person, with every object and, since persons and objects are in constant change, with different times. The process of mathematical deduction in the emotions must therefore be concerned largely with placing the appropriate name at the important jointures of the infinite possibilities, and with working the full variations of possibilities opened by associations, reciprocities, and imitations in the emotions.

⁴⁸ *Eth.* III, 30, 29 and sch.; II, 163, 162.

⁴⁹ *Eth.* III, 42; II, 173.

⁵⁰ *Eth.* III, 44 and 38; II, 174, 169.

⁵¹ *Eth.* III, 31 and 32 and sch.; II, 164-165.

⁵² *Eth.* III, 35; III, 166.

After the main directions have been laid the rest is largely a recognition of names appropriate to each logically possible situation. Thus one could go through the list: *wonder* is the emotion that accompanies the sight of something novel; if we fear the object it is *consternation*; if it is a fine quality in a man which we regard, it is *veneration*; if veneration is joined to love, it is *devotion*; *contempt* is the opposite of wonder, and *derision* and *disdain* follow from it as veneration follows from wonder. In the second place, all the mixtures and coexistences of the emotions follow from the same principles. On one ground, for example, we should be rejoiced to see the thing we hate destroyed, on another ground, in the same situation we should pity the same thing its misfortune.⁵³ The deduction, therefore, by explaining the emotions through their first causes, permits the development of their full number from a few principles and from those same principles invokes the necessity of their complex coincidences and contrarieties. The permutations of the object can be the matter of calculation: "there are as many species of pleasure, pain, desire and consequently as many kinds of emotions composed of these (such as wavering of the mind) or derived from these (such as love, hate, hope, fear, etc.) as there are species of objects by which we are affected."⁵⁴ The nature of the individual too determines some of the variables: "any emotion of any individual differs from the emotion of another as much as the essence of the one differs from the essence of the other."⁵⁵ Different men can therefore be affected by one and the same object in different ways, and one and the same man can be affected by the same object in different ways at different times. But it is only the number of the emotions which place them beyond a more than general knowledge by man. They vary infinitely because there are infinite combinations possible between things and persons. In themselves they are not capricious but necessary sequences of natural events. Psychology, in the only sense that Spinoza can be said to have discussed it, may engage in the statement of the essential forms which emotions may take, not in the enumeration and classifications of typical cases.

⁵³ *Eth.* III, 47; II, 175.

⁵⁴ *Eth.* II, 56; II, 184.

⁵⁵ *Eth.* III, 57; II, 186.

It is only the passions which have been touched on thus far: the modifications which are worked in man as a result of his existence as a particular being in a world of particular things, that is, the emotions which follow in man, considering him in terms of his mind, from his imagination. Such emotions he shares with all the animals, the desires and lusts of one animal being different from those of another only as their respective natures are different. The essences of each will determine the nature of the endeavor and striving of each. We are active as well as passive, and as rational creatures we have adequate as well as inadequate ideas. There are pleasures and desires which proceed from adequate ideas as well as those which proceed from inadequate ideas; pains arise only from inadequate ideas, which is to say that the passions alone may lead to our degradation although they as well as the actions may lead to greater perfection. In our actions, as opposed to our passions, we are in the certainty to proceed to higher perfection. The reason of man, but more particularly his understanding, must make him aware of his nature and his place as part of the whole of nature. His orientation and attitude must be changed in this realization. "If we understand this clearly and distinctly, that part of us which is defined by intelligence, that is, the best part in us, will acquiesce in it entirely and will try to persist in the acquiescence. For in so far as we understand, we can desire nothing save that which is necessary, nor can we acquiesce in anything save what is true: and therefore in so far as we understand this rightly, the endeavor of the best part of us agrees with the order of the whole of nature."⁵⁶

So far as it is active the mind will act in terms of its own essence uninfluenced by external circumstances. The emotions of the mind so far as it is active are all to be referred to *strength of character* (*fortitudo*). They are of two sorts: the desire of each man to preserve that which is his own according to the dictate of reason alone, this is *magnanimity* (*animositas*); and the desire by which each endeavors according to the dictate of reason alone to join all other men to himself in friendship, this is *highmindedness* (*generositas*). Courage is directed toward the good of

⁵⁶ *Eth.* IV, App. XXXII; II, 276.

others. Species of courage are *temperance*, *sobriety* and *presence of mind in danger*; species of highmindedness are *modesty* and *clemency*. By their very nature the actions can effect only our good and our perfection, for that which may harm us could not proceed from our own nature and from our adequate knowledge. So long as we act in this sense, we proceed to higher perfections with as little uncertainty as when we pursue truth with reason. So long as we have adequate knowledge of our nature and of the eternal things as the proximate causes of our nature, we can remove the dangers from, and reconcile ourselves to, even the uncertainties of the imagination and the disturbances of the passions.

CHAPTER IV

REASON, RELIGION, AND THE STATE

I

TO have determined the status of good and evil and to have concluded that both are necessary according to the laws of nature and of human nature, is still only the preparation for and introduction to ethics. The first three books of the *Ethics* afford an elaborate statement of the background of human behavior; from them one may proceed to an objective, metaphysical description of it. But though the concepts of good and evil find their place, there is very little ethical guidance in just the scientific statement of what is involved in conduct. Conclusions that, for example, "everyone judges according to his own disposition what is good,"¹ that the good is what advances man's perfection, that it is known indubitably by reason, may be made into a statement of the terms of the problem, but they scarcely constitute its solution, particularly since "men are more strongly influenced by opinion than by true knowledge." For three books the investigation has been concerned with what the knowledge of good and evil involves and what virtuous action would therefore entail; it is proper to turn now to the practical question, for which all this has been a preparation, of the rules which should govern virtuous action. To the extent of what has preceded, the nature of the universe and our relation to it and knowledge of it must be considered preliminary to ethics; "it is necessary to know both the power and the impotence of our nature that we may be able to determine what reason can do in moderating the desires and what it can not."²

The materials for the solution of that problem were in the consideration of the nature of God and the nature of

¹ *Eth.* IV, 70, dem.; II, 263.

² *Eth.* IV, 17, sch.; II, 221.

the human mind. Dependent on the conclusions concerning them, good and evil have been reduced to the relative perfections of the human body and mind, and the emotions are the gauges by which transitions to greater or less perfection are indicated. But the emotions are the necessary consequences of the ideas from which they originated. The kinds of emotions can be separated and explained according to the kinds of ideas on which they depend, and the varieties of knowledge in turn have been explained by the nature of the mind and the derivation of things from God. What has been determined concerning reason and imagination can therefore be turned to the solution of the ethical problem; in fact, "the imagination is an emotion in so far as it indicates the disposition of the body."³ Passions follow from inadequate ideas; and inadequate ideas are the necessary consequences of a finite intelligence in an intelligible world.

It is no paradox to insist that irrationality is implied in a rational universe. Even the wise man can not remove with his wisdom the distortions of a partial view; he must have as many inadequate ideas as the fool, since he, no less than the fool, must continue to see and experience things as one man here and now. Each thing that is encountered does nothing more than fret a sensitive center of an organism. Reason can recognize the error involved in judgments based on such sensations, but it can do no more than that; there is nothing in a false idea that will disappear and lose force when confronted with the truth.⁴ Therefore so long as a thing continues in the same circumstances it will continue to impress us as it formerly did, even though we have learned that the truth concerning it is at variance with that impression; what things seem to be, is determined only in small part by what they are. Man is subject to the passions for the same reason as he is subject to the imagination, because he is a part of nature and because things happen to him of which he is only partially the cause. The first step in the analysis of the passions is to recognize that they are necessary consequences that follow from the powers and traits of man. He has no absolute power for either exist-

³ *Eth.* IV, 9 dem.; II, 216.

⁴ *Eth.* IV, 1; II, 211.

ing or acting; his life depends on a series of events which must appear in his knowledge to be contingent; and in the order of nature he is nothing more than a possibility which has been realized, not by his own power, but by a succession of causes whose occurrence he could not have foreseen. Still, involved in what he is and what he knows himself to be, are consequences and ideas which share none of his contingency but are eternal. The problem is not to remove the passions, since that is impossible, but to moderate and control by the necessity which is involved in man's being the changes that come from the contingency of his existence.

From the terms of the analysis furthermore it is clear that the force which could cause a transition to a greater or less perfection could be met and opposed only by a force making toward a contrary transition. Passions are determined by the power of an external cause working on us; our own force striving to preserve our existence does not enter directly into them, and there is a dismaying strength in the external causes, for man's limited power to exist is easily surpassed. It follows, then, that the force of any passion may so far exceed the power of man that the passion will adhere obstinately to him, and there is no recourse from emotions except to emotions. The mind undergoes an emotion when the body is affected by a modification; the emotion can be removed only by the idea of a modification of the body contrary to and stronger than the modification which we suffer.⁵ The problem of ethics is properly the control of the emotions which are injurious and the transfer of the desire they involved to good ends. The direction in which the solution may be sought is suggested by the fact that besides imagination there are two types of knowledge, each with its appropriate emotion. It is a question of the relative efficacy and the diverse fields of application first of reason with its general notions and then of intuition with its knowledge through the attributes of God.

The discussion of ethics then can be thrown entirely into terms of the emotions. The deduction which passed from God through his attributes and the eternal modes to human knowledge must undergo its last transition into the emo-

⁵ *Eth.* IV, 7 and cor.; II, 214, 215.

tions, the alterations of transient beings in view both of an order of changes and of essences, before it is directly applicable to the estimation of human well-being and happiness. The laws of the nature of any individual being are the expressions also of the resistance to change of a being definitely constituted and placed in a changing world. This is the basis of action, and all action is in intention moral. "Each one necessarily by the laws of his nature desires what he thinks to be good and turns from what he thinks to be evil." ⁶ A principle of utility is the automatic rule of action. Virtue is definitely in preserving our being and our power to act. "The more any one seeks what is useful to him, that is, endeavors to preserve his being, and the more he is able to, the more he is endowed with virtue; and on the contrary, in so far as any one neglects to preserve what is useful, that is, neglects to preserve his being, he is thus far powerless." ⁷ It would be difficult to reduce this metaphysics of morality to practical and recognizable terms if these increases and diminutions of power were not precisely the emotions. Good and evil can be known because "the knowledge of good and evil is nothing else than the emotion of pleasure or pain in so far as we are conscious of it." ⁸

Virtue is to act according to the laws of one's own nature; such action will further one's power of acting and the sign of that increased power is pleasure. Clearly virtue and pleasure will be achieved most certainly if the mind act always according to adequate ideas. If one is to act best, all the difficulties of knowing the truth must be faced. It is no easier to correct an error in the judgment of what is beneficial than any other error of the imagination. The emotions can no more be controlled by only knowing what is good than the ideas of our imagination can be changed merely by knowing what is true. The force of the emotions is not determined by the accuracy of the idea which is present to us, but by the vivacity with which we imagine it. Consequently anything which will enforce the thing more vividly on our imagination will increase the

⁶ *Eth.* IV, 19; II, 223.

⁷ *Eth.* IV, 20; II, 224.

⁸ *Eth.* IV, 8; II, 215.

emotion with which we view it: an emotion will be stronger if we imagine its cause to be present; or if it is toward a thing past or future, the emotion will be stronger the closer the thing is to the present; the emotion toward a necessary thing will be more intense, other things being equal, than the emotion toward a thing that is only contingent or possible; it will be more intense toward a thing that is past than toward one which does not exist now but which may exist.⁹ Obviously, since the rise and increase of emotions is in proportion to the vividness with which the object of the emotions is presented, it will happen frequently that the emotions will override better considered and rational decisions. When a true knowledge of good and evil does restrain the emotions, it is not in virtue of its truth, but in virtue of its strength as an emotion; and since its force as an emotion is defined by our own essence and power, it may be checked by other emotions which arise from more powerful external causes. The desire which arises from the true knowledge of good and evil will operate according to the same principle as other emotions: when it has to do with future or contingent or possible things, it will be more easily checked or destroyed by the desire of present things.¹⁰

On the background of this richly significant universe, the problems of ethics display a diversification of meanings which would have been unsuspected if metaphysics and physics had not been made the foundation of ethics. The basis of virtue is the desire to act so as to preserve one's being. But action toward that end means many other things as well, in a universe such as analysis has revealed this one to be. It means also to live under the guidance of reason, to understand, and finally to know God. This is clear if one consider the nature of the body and the mind and their relation to each other and to God. It is the essence of the mind to assert the existence of the body, and consequently the first and only basis of virtue must be the endeavor to preserve oneself, for prior to such endeavor nothing could be conceived, and without it no virtue would be possible. No one can desire anything else, whether to be happy, to act well, or to live well, unless he desires at

⁹ *Eth.* IV, 9 and cor., II, 13; II, 216, 217, 219.

¹⁰ *Eth.* IV, 14, 15, 16, 17; II, 219, 220, 221.

the same time to be, to act, to live, in a word, to exist actually.¹¹ But one's being is preserved only to the extent that one continues to act. To act according to one's nature and essence is virtue, but that is to act only in terms of adequate ideas; therefore to act absolutely according to virtue is to act under the guidance of reason. Virtue then is understanding, and the endeavor to understand is in turn referred to as the first and only basis of virtue since it is identical with the endeavor to preserve oneself.¹² "Whatever we endeavor to do by reason is nothing else than to understand; nor does the mind, in so far as it uses reason, judge anything useful to itself save what is conducive to understanding."¹³ "To understand, therefore, is the absolute virtue of the mind."¹⁴ The quality and powers of the mind depend on the properties and susceptibilities of the body, and it is no extension of the principle that the body and mind are the same individual to declare that what furthers the power of action of the body will be conducive to the understanding of the mind. But if we know nothing to be certainly good save what is conducive to understanding, it must be borne in mind that the idea of anything involves the idea of God. It follows easily that "the greatest good of the mind is the knowledge of God and the greatest virtue of the mind is to know God."¹⁵

Virtue is desired for its own sake. No one could endeavor to persist in his being for the sake of anything else, for that endeavor to persist is his very essence.¹⁶ There is, moreover, nothing more excellent for which we should desire to preserve our being; happiness consists in self-preservation and self-assertion. Suicide, on this score, represents a complete absence of virtue in those who are so powerless in spirit as to permit themselves to be overcome by external causes repugnant to their nature. Each person, moreover, if he acts truly according to the laws of his nature will act according to virtue. But since such action will be according to reason and since reason represents things

¹¹ *Eth.* IV, 21 and 22 cor.; II, 225.

¹² Cf. *Eth.* IV, 24 dem.; II, 226.

¹³ *Eth.* IV, 26; II, 227.

¹⁴ *Eth.* IV, 28 dem.; II, 228.

¹⁵ *Eth.* IV, 28; II, 228.

¹⁶ *Eth.* IV, 25; II, 226.

as they flow from their first causes and in the same order in all men, virtuous men will all be directed to the same end. "The greatest good of those who follow virtue is common to all and all can enjoy it equally"; it is virtue itself or the knowledge of God.¹⁷ Between the two extremes of a complete spiritlessness which is overcome by circumstances and a strength of mind equal to the contemplation of God, range the entire series of ethical possibilities.

It is to be observed that, once more, the problem is a double one and the solution double. Virtue consists in acting according to one's own nature, and that ultimately is to know God. But as finite creatures we can not act entirely and only according to our own nature; since we are finite we can not cease to be only part of the universe, and we must suffer things as well as act. There is consequently the problem of avoiding evil as well as the problem of achieving whatever good is in our power. For the wise man this problem presents no difficulty since he sees all things follow from the necessity of the divine nature, and therefore he knows that what seems evil to him seems evil because of the confused and mutilated manner in which he sees it.¹⁸ Even a wise man, however, is not free from the needs which only men and things can satisfy. He has a body to maintain and a mind to keep fresh and agile. Things may be good for him as they are useful in furthering his acting and his understanding. The mind has some power to deal with such things too: a thing can aid or hinder our power of understanding only if it has something in common with our nature; so far as it agrees with our nature it is necessarily good; it can be bad only so far as it is contrary to our nature. Men, by such a calculation, are the greatest aids to men, particularly when they live under the guidance of reason, since they agree then in nature. It is a consequence of this double aspect of life that the wise man will realize at the same time that the evils of fortune which come from things and men related to him are not the real evils, and that the society of rational men is one of the highest goods he can attain. For the same

¹⁷ Cf. *Eth.* IV, 36; II, 234.

¹⁸ *Eth.* IV, 73, sch.; II, 265.

reason he will avoid being guided by the opinion of others and he will try to avoid accepting favors from ignorant people lest he be forced to direct his future actions by gratitude to them. Yet it is essential not only that he strive to acquire a knowledge of the union that the mind has with the whole of nature, but further that he strive to form a society in which as many people as possible will acquire such a knowledge. This, moreover, is why moral philosophy and the education of children and medicine and mechanics are so very useful and why most of all a method must be found for curing the understanding and purifying it at the beginning.¹⁹ For whereas men agree in nature when they follow reason, they are variable according to the passions by which they are affected and differ therefore in nature; so it happens often that one man is contrary to another and works injury to him.²⁰

The contrarieties of man against man are wholly inevitable since man does not follow reason alone; it is necessary therefore to set up artificial restraints in order to anticipate and check the passions when they arise. By the nature of things unless a time comes when all men are able to follow the dictates of reason, this must be done by some other means than reason. There are two such ways: the state is set up that men may be made to do by the hope of recompense and by the fear of punishment that which they would do naturally if they were led by reason; religion is instituted to accomplish the same end through the recitals and commandments of its prophets. Both are provisional and are imitations of rationality rather than reasonable themselves, but since they accomplish what a purely rational ethics could not, they are of high moral efficacy. Both are effective supplements to reason, since both work to the end reason proposes, and in both the appeal is through the imagination.

II

IT WOULD be a falsification possible only through ignorance of the nature of man to suppose that, because the exercise

¹⁹ *Int. Emen.*; II, 8-9.

²⁰ *Eth.* IV, 29, 30, 31, 32, 33, 34; II, 228-231.

of reason is man's highest function, his only virtue is to think. True, it is the greatest of his virtues, but there are others, and it is possible to live a good life — even to be saved — without great knowledge. In fact, since man is so limited in his powers, the very exercise of reason requires other virtues. They are subordinated, in the rational man, to the dictates of reason, but since few men are rational, actions and desires in all but a few men must be directed by some other means than the decisions of the mind. Apart from reason and virtue, man finds the things he desires outside himself; these alone of all the things he desires are in his single power and in the laws of his being. "All things that we desire virtuously (*honeste*) are referred, generally speaking, to these three — to understand things through their first causes, to overcome passions or to acquire the habit of virtue and finally to live securely and in a healthy body."²¹ Of these, the securing of the first two depends on the powers and attitude of the mind itself; Spinoza does not take up specifically how they are to be acquired until the Fifth Book of the *Ethics*. The Fourth Book is concerned with the third object of desire, the living of a secure and tranquil life. Even the philosopher, though his happiness is founded on true knowledge and can not be shaken by the most unfavorable turns of fortune, must desire to live as undisturbed a life as possible. There is nothing that knowledge can accomplish itself to achieve and maintain health and comfort and favorable circumstances. Still something can be done; this is the domain of religion and the state, not of philosophy. Religion may supplement philosophy by teaching a love of one's neighbor, while the state can enforce a respect of the rights and privileges of others. The philosopher will submit his actions to supervision; he will have fuller leisure from distractions, if he lives in a peaceful state and conforms his actions to the precepts of religion.

Both religion and the state try to direct man to things that are beneficial, not by presenting the end toward which they tend, but by offering some other inducement which has a more effective appeal to the generality of men than

²¹ *Theo.-Pol.* III; III, 46.

reason would have. Intellectual ideals would be of little value in the solution of political difficulties and the intellectual love of God is not essential to the religious life. "Reason is the domain of truth and wisdom; theology the dominion of piety and obedience. For the power of reason does not extend so far as to determine that men can be happy by obedience alone without the understanding of things. But theology teaches nothing except this, commands nothing except obedience and neither wishes to nor is able to oppose reason in anything. She defines the dogmas of faith only so far as suffices for obedience, but she leaves to reason to determine their precise truth, for reason is the true light of the mind without which the mind sees nothing except dreams and phantoms."²² The line Spinoza draws between philosophy and religion is a sharp one. The highest end of man is the development of the intellect which is the best part of his being; this is exclusively the task of philosophy — the understanding of things as they proceed from their first causes; and in such an understanding there can be no doubt of what is truly good for men. Religion gives a way to choose between actions and to decide between better and worse; it does not support the choice with reasons but with commandments which go back to the revelation of God for authority. Where reason sees the unchanging enchainment of things, faith gives rules to lead man through their congeries and shiftings to salvation. Reason consequently formulates principles; faith sets precepts. "There is no end for philosophy except truth; for faith, as we have shown abundantly, there is nothing but obedience and piety. Again the foundations of philosophy are common notions, and philosophy must be sought from Nature alone; the foundations of faith are history and language, and faith must be sought only from the Scriptures and revelation. Faith therefore allows the greatest liberty of philosophic speculation to every one, so that each one may feel without blame as he wishes concerning anything, and it condemns as heretics and schismatics only those who teach opinions which tend to produce obstinacy, hatred, strife and anger; while on the other hand it consid-

²² *Theo.-Pol.* XV; III, 184.

ers as faithful only those who advise, with the full strength of their reason and faculties, justice and charity.”²³

Yet despite the sharpness of the distinction between them, reason and faith are not antagonistic. The purposes of the two are distinct: religion teaches only morality and leaves all other things for reason to discover. But that which it does teach, its morality, is in clear agreement with reason, “for it is no accidental coincidence that the word of God in the Prophets should agree wholly with the very word of God speaking within us . . . Therefore this whole basis of theology and Scripture, though it does not admit of mathematical demonstration, may yet be accepted with sound judgment. For it is stupidity to refuse to accept that which is confirmed by the testimony of so many prophets and from which a great comfort arises for those whose reason is comparatively weak and from which a very great benefit to the state follows, and which moreover we may believe without the slightest peril or condemnation and which we should reject for no other reason than that it can not be demonstrated mathematically: as if nothing could be admitted as true in instituting our lives wisely, which could ever in any possible way be called into question, or as if most of our actions were not full of uncertainty and hazard.”²⁴ The wise man will therefore consider the very great utility of the Holy Scriptures and revelation. Religion opens a way to happiness and blessedness which reason would have ignored. That way moreover is one which is open to a great many people who have not the power of reason by which to guide their actions according to virtue.

Revelation teaches this by a singular grace of God which can not be understood rationally: no greater virtue than obedience is required to attain happiness. There is no need of great breadth of intellect or power of thought, but simple obedience to the precepts which faith enjoins is the path to salvation. “In other words, revelation, not reason, can teach that it is enough for salvation or blessedness to embrace the divine decrees as laws or commands; there is no need to conceive them as eternal truths.”²⁵ Everyone without exception is able to obey, but the number of those

²³ *Theo.-Pol.* XIV; III, 179-180.

²⁴ *Theo.-Pol.* XV; III, 186-187.

²⁵ *Theo.-Pol. Annot.* 31; III, 263.

who acquire the habit of virtue by reason alone is very small compared with the whole human species; if it were not for the testimony of the Scriptures, therefore, we should doubt the salvation of almost all men. Moreover, since the Bible makes no pretenses at establishing scientific veracity or inculcating doctrines, it is free to adapt its teaching to the understandings and the preconceived opinions of the multitude.²⁶

The requirements of the situation are simple in view of the nature of man. Since men who are possessed of no outstanding penetration of mind are to be saved and since to be saved they must be aware at least of the end to which they are working, the divine will is made manifest through the imagination. The knowledge of God obviously can not be translated to imaginative terms, since the imagination treats only of individual things; the imagination can therefore present only the things which will lead to God and the actions by which a man may be saved. When we know God directly we know an axiomatic truth, that his essence includes his existence and that he is a perfect being of infinite perfect attributes from which all things flow necessarily; when God appears through things and speaks in the interpretation of the prophets, we receive a command and a rule of conduct. "The divine laws appear to us in the light of laws or commands only so long as we are ignorant of their cause: so soon as their cause is known they cease to be laws and we embrace them no longer as laws but as eternal truths. In other words, obedience to him passes into love of him, which arises from true knowledge as necessarily as light from the sun. Led by reason, then, we may love God but not obey him, since we can neither embrace the divine laws as divine so long as we are ignorant of their cause nor conceive God rationally as a sovereign laying down laws."²⁷ Even in the case of the transmission of the Decalogue, if God had spoken to the Jews without the intervention of bodily means, but directly and immediately, they would have perceived it not as a law but as an eternal truth.²⁸

²⁶ Cf. *Theo.-Pol.* XV; III, 180.

²⁷ *Theo.-Pol.*, *Annot.* 34; III, 264.

²⁸ *Theo.-Pol.* IV; III, 63.

The prophets by whom these revelations are transmitted must be, most naturally, men of vivid imagination rather than men of profound intellect. Unusual intellectual powers might even hinder the working of the imagination, and so Solomon would have been incapacitated for the task of Moses and the Proverbs could not fill the place of the Decalogue. The prophet groups in rules and precepts the observations which he makes relative to the roll and flow of events. His pronouncements are of the class of practical knowledge which states experience in slight, useful generalizations without pretending to reach the true laws of reason. Nevertheless the source of the two, of prophecy and reason, is the same, and wise generalities are built on the same basis as prophecy; both depend on the knowledge of God alone and his eternal decrees, so that natural knowledge can be called prophecy. In respect to its certainty and its source, ordinary knowledge is not inferior to prophetic; moreover it is arrived at in the same fashion except that it is less indirect and requires no bodily intervention nor any interpretation. "Since our mind has the power to form certain notions explaining the nature of things and setting forth the uses of life from this alone, that it contains in itself objectively (*objective*) the nature of God and partakes of it, it follows that we may assert rightly that the nature of the human mind (in so far as it is conceived thus) is the first cause of divine revelation. All that we clearly and distinctly understand is dictated to us by the idea and nature of God; not indeed through words, but in a way far more excellent and which agrees best with the nature of the mind, as all who have tasted intellectual certainty have doubtless themselves discovered."²⁹ The religious precepts of the prophets were not communicated to them directly and according to the nature of the mind but figuratively. Moses alone spoke to God face to face and Christ alone communed with him mind to mind, and in these cases Spinoza avows ignorance of how the communication took place in revelation, since it is no explanation to say only that it occurred by the power of God.³⁰

Prophecy then or revelation "is sure knowledge of some-

²⁹ *Theo.-Pol.* I; III, 16.

³⁰ *Theo.-Pol.* I; III, 21.

thing revealed by God to man." A prophet is one who interprets the revelations of God to those who are unable to attain to sure knowledge of the things revealed and who can therefore apprehend them only by simple faith.³¹ That it is imaginative knowledge and that it does not aspire to scientific certainty is not wholly a defect and a weakness, since it is able, in virtue of the very fact that it operates by the imagination, to expound things which the reason could never discover. "As the prophets perceived the revelations of God by the aid of the imagination, they could indisputably perceive much that is beyond the boundary of the intellect, for many more ideas can be constructed from words and images than from those principles and notions alone on which the whole of our natural knowledge is reared. It is clear then why prophets perceived and taught nearly everything parabolically and enigmatically and expressed all spiritual truths in bodily terms: indeed these characteristics agree best with the nature of the imagination."³²

There is no need therefore that one try to substantiate the Scriptures on rational grounds, since the authority of the prophets is authority enough for the Bible. These directions of conduct were meant for people who would be unimpressed by a rational demonstration, and therefore some other sign of authority than only reasonableness must be warrant for the admonitions of the prophets. It is to be expected that the sign of the prophet be imaginative; all prophetic certitude is founded on three considerations: 1. that things which are revealed be imagined vividly, just as objects are perceived when one is awake; 2. the presence of a sign; 3. lastly and chiefly, that the prophets have minds given wholly to what is right and good. The manner in which the prophecy is made may undergo great variation: its expression may be suited to the prejudices of the masses and its statement to the temperament and imagination of the prophet. Moreover the sign which was acceptable as warrant for one prophet may not have been sufficient for another. There are differences too in clarity of vision as well as in the details of the revelations of different prophets.

³¹ *Theo.-Pol.* I; III, 15.

³² *Theo.-Pol.* I; III, 28.

The style is set according to the prophet's eloquence, cultivated or untutored, compressed or prolix, clear or obscure. Finally, there is no need of agreement between prophets concerning intellectual doctrines, for ignorance of important matters even concerning the nature of God's attributes will not interfere with a prophetic ability, and prophets, according to the Scriptures, were praised and commended not so much for the sublimity of their intellect as for their piety and faithfulness.³³

Of these marks the presence of a sign is most readily recognized. Since the certainty of revelation is not self-evident, the true prophet should have some sign which will mark him definitely. There must be a work of wonder accompanying the prophecy to give the appearance of divine approbation to what is revealed; the prophet must not only speak the word of God but must perform miracles. Miracles, however, are no contravention of the laws of Nature for that is inconceivable. Nature preserves a fixed and immutable order; all things proceed from God following unchanging laws in a necessary sequence of causes and effects. God has been the same in all ages, whether known or unknown, and the laws of nature are so perfect that nothing can be added to or taken from them. Consequently in that immutable order of nature the miraculous is only the marvellous, the cause of which is unknown to us, and certainly unknown to him who related the miracle; miracles appear to be something new only because of man's ignorance.³⁴ Nothing, moreover, is revealed by miracles concerning the nature of God, for the essence and providence of God can be known only from the order and fixed series of nature; miracles are only the mark of one who has a revelation from God, they convey that much information concerning God's prophet, but none concerning God — if a man preaches the established doctrine and performs miracles he is known to be a prophet. "A miracle, whether it has a natural cause or not, is a phenomenon which can not be explained by its cause, that is a phenomenon which surpasses the human understanding; but from such a phenomenon and certainly from the fact that it surpasses our understanding we can

³³ Cf. *Theo.-Pol.* II; III, 37.

³⁴ *Theo.-Pol.* VI; III, 83 and 95-96.

gain no knowledge. For whatever we understand clearly and distinctly should be plain to us either in itself or by means of something else which is understood clearly and distinctly in itself. Wherefore we can gain no knowledge of God's essence or existence, nor indeed anything concerning God and Nature from a miracle or a phenomenon which surpasses our understanding. But on the contrary when we know all things to be ordained and ratified by God, and the operations of nature to follow from God's essence, and the laws of nature to be eternal decrees and volitions of God, we must perforce conclude that we know God better and the will of God, in the degree that we know natural things better and understand more clearly in what manner they depend on their first cause and in what manner they operate according to the eternal laws of nature."³⁵

The Bible is in no sense a repository of wisdom concerning natural phenomena and spiritual conceptions. Revelation commands more frequently than it teaches. Even Christ, who alone of the prophets perceived what was revealed truly and adequately, proclaimed his revelations as laws. He was forced to do this because of the obstinacy and ignorance of the people, just as God had been compelled to accommodate his truths to the popular comprehension.³⁶ Provided only virtue be inculcated, the motivation to virtue and the incentive to good deeds need not be rational. An interpretation of the Bible must consider all this, that prophecy is imaginative in nature and moral in end and that it will see and retell as real what reason may know to be symbolic. It must take into consideration furthermore the way in which hebrew phrases and metaphors may embroider a miracle and swell it in retelling. The method of understanding the Bible should follow the method of science. As science finds evidence for its principles in the flow and history of nature, so scriptural interpretation should proceed from the examination of the history of the Scriptures and should try to infer from it the intention of its authors; and as nature is the only basis for natural knowledge, so the Bible is the only reference for religion. It is more important to avoid a mutilated text than an inconsis-

³⁵ *Theo.-Pol.* VI; III, 85.

³⁶ *Theo.-Pol.* IV; III, 65.

ent doctrine; all that is required of biblical narratives is that virtue be taught.

Since the concern of the Bible is with commands rather than with truths, the history of any statement is important to establish its authority. The one universal rule in interpreting Scripture is to accept nothing as authoritative scriptural statement which we do not perceive very clearly in the light of its history.³⁷ The properties of the language in which the Bible was written must be known; each book must be examined to discover similarities and confirmations as well as ambiguities; the environment of all the prophetic books must be studied: the life and opinions of its author must be learned as well as the bearing which the vicissitudes it underwent after composition may have had on its present state. In the light of such knowledge the pronouncements of the Bible would be clear. Spinoza was convinced that among those pronouncements there would be found some doctrine which is universal and fundamental to all Scripture, which would commend all that is most profitable to men and comprehend God's omnipotence, his care for all men, his love for those who adore him and love their neighbors as themselves. Such general doctrines will be touchstones for all doctrines less universal, for they are the source from which all precepts for the general conduct of life flow. Each precept will be seen to be a manifestation, on some particular occasion, of the true virtue.

There are obviously great difficulties in the way of carrying out such a method, for the histories of the books of the Bible are incomplete; little is known of their authors and the difficulties of language are great. Spinoza made, however, a brave start in the application of the method, and his conjectures and analyses are sometimes amazingly acute. There is fortunately no obscurity to be removed in moral questions, and he finds the moral intention always clear, even in obscure contexts. The cardinal precept which the Scriptures enjoin is to love God above all things and to love one's neighbor as oneself. Passages which are indisputably dependent on this are undoubted. Such passages and the preachments contained in them attempt only to regulate the conduct of life and to "transmit and teach things in such

³⁷ *Theo.-Pol.* VII; III, 99.

a manner as can most readily be comprehended by all, not deducing and concatenating things from definitions and axioms, but narrating quite simply and confirming its statements, with a view to inspiring faith, by experience alone, set forth in miracles and histories, and narrating these things in the style and phraseology best calculated to move the popular mind.”³⁸ The only knowledge that is required is a knowledge of the divine justice and charity; a virtuous life can be passed in ignorance of all things save an obligation to God; the Bible is designed to make men obedient, not wise. “Faith is nothing else than to feel such sentiments concerning God, that if they were ignored obedience to God would be removed and that if obedience is posited those sentiments are granted necessarily.”³⁹

All the dogmas of the universal religion follow from and depend on that cardinal precept of the love of God. The only dogmas that can claim a place in religion are those of such a nature that without them obedience is impossible and that with them obedience will follow. Concerning all other dogmas than these, each man is his own best judge, since he knows himself best and he should choose what is best suited to him to confirm him in his love of justice. They are easy to choose since “they must all tend to this one doctrine, namely that there exists a Supreme Being, who loves justice and charity, and whom all must obey that they may be saved and whom all must adore in the practice of justice and charity toward one’s neighbor.”⁴⁰ They will emphasize his sovereign and just being, his unity, his omnipresence, his supreme dominion over things, his worship of justice and charity, his forgiveness of sin and the salvation of the obedient. These are the only doctrines needed for living a good life. Faith follows from piety rather than from truth and one achieves piety only through obedience. The best faith therefore need not be possessed by him who displays the best reasons, but by him who displays the best works of justice and charity. This is an instrument for the religious in the control of his passions. It is important however that just as reason is often powerless to restrain the

³⁸ *Theo.-Pol.* XIII; III, 167.

³⁹ *Theo.-Pol.* XIV; III, 175.

⁴⁰ *Theo.-Pol.* XIV; III, 177.

passions, so too there are moments when religion is ineffective. Reason is of little avail in the distraction of events and to the multitude of men; religion is apt to lose its power of persuasion in times of grief and of grave happenings. There remains one more means which may be efficacious in situations where reason and religion are both little effective; political enforcement is another external device for restraining the passions.

III

THE state is instituted to compel men by force to do what is better for them, and laws are necessary because men do not act always according to their best advantage. If they were so constituted that they desired nothing but what reason dictates, society would have no need for laws: it would be sufficient to teach true moral doctrines and men would freely and without hesitation act in accordance with their true interests. But human nature is formed far otherwise than that; everyone indeed seeks that which furthers his own interests, but the seeking is not always in accordance with what sound reason would suggest. Most men estimate desirability and usefulness according to fleshly instincts and emotions which take no thought beyond the present and immediate object. Consequently no society can exist without government and force and laws to restrain and repress men's desires and immoderate impulses.⁴¹ The laws of nature are not laid out and designed to man's welfare, and men themselves are so constituted that, though they might be of the greatest aid to each other, they are frequently the greatest hindrances placed in each other's paths. If men lived according to the dictates of reason, each one would possess what he judges good by his own right without injury to others. But because they are liable to emotions which far surpass human power or virtue, they are often drawn in different directions and are contrary to each other at the very moment when they need each other's help. To live in concord, to guarantee mutual security, and to be of

⁴¹ *Theo.-Pol.* V; III, 73.

use to each other, there must be an agreement to do nothing that will be of injury to another.

Such an agreement is the formation of the state; it consists in the surrendering by each man of his natural right. Every man exists by a sovereign right of nature and consequently every man does by that sovereign right all things which follow from the necessity of his nature. It follows that each man has a right to what he judges advantageous to himself, that furthermore he judges for himself by the sovereign right of nature what is good or bad, that he consults his advantage according to his disposition, revenges himself, tries to preserve that which he loves and destroy that which he hates.⁴² Whatever he does, he does by supreme right. Self-interest moreover is the motivation of all his desires and actions; at the bottom of whatever he does is the single desire to continue as he is in his actions and his desires. He has a right to what he wants, and what he wants is determined by the laws of his being; he is turned only toward things which he imagines to further somehow his powers. Whatever he is able to do he has the right to do; his nature determines him to act in the way he must. "By right and ordinance of nature I understand nothing other than the rules of nature and of each individual by which we conceive each one to be determined naturally to a certain manner of existing and acting. For example, fish are determined by nature for swimming and the greater for devouring the less; therefore fish enjoy the water by sovereign natural right and the greater devour the less. For it is certain that nature considered absolutely has sovereign right to do all things that she can do; that is, the right of nature extends as far as her power. The power of nature indeed is the very power of God who has sovereign right to all things, but since the universal power of all nature is nothing more than the aggregate power of all individuals, it follows that every individual has sovereign right to do all that he can; in other words the rights of each individual extend as far as his conditioned power extends. And since it is a sovereign law of nature that each thing should try to persevere so far as it can in its actual state, and to do that because of no

⁴² *Eth.* IV, 37 sch. II; II, 237-239. Also *Eth.* IV, *Appen.* VIII; II, 268.

other thing but only itself, it is clear that every individual has the sovereign right to do it, namely to exist and act as it has been determined to naturally. We do not recognize here any difference between men endowed with reason and those who are ignorant of true reason, nor among fools, madmen and sane men. Whatsoever any thing does, acting according to the laws of its own nature, it has a sovereign right to do, in as much as it acts as it was conditioned to by nature and can not act otherwise. Wherefore among men, so long as they are considered to live under the sway of nature alone, he who does not yet know reason or who has not yet acquired the habit of virtue, lives according to the laws of his appetite with as sovereign a right as he who orders his life by the laws of reason.

"Just as the wise man, then, has sovereign right to all that reason dictates, namely to live according to the laws of reason, so also the ignorant and foolish man has sovereign right to do all that desire induces him to, namely to live according to the laws of desire. And this is the same as the doctrine that Paul teaches when he acknowledges that prior to the law, that is, as long as men are considered as living under the sway of nature, there is no sin.

"The natural right of each man therefore is determined by desire and power, not by sound reason. All are not conditioned naturally to act according to the laws and rules of reason; indeed on the contrary all men are born ignorant of all things and before they can learn the right way of life and acquire the habit of virtue, the great part of their life, even if they have been well brought up, has passed away; but in the meantime they are nevertheless bound to live and to preserve themselves so far as they can, namely, by the unaided impulses of desire. Nature has given them no other guide and has denied them the present power of living according to sound reason, so that they are no more bound to live by the dictates of an enlightened mind than a cat is bound to live by the laws of the nature of a lion.

"Whatsoever, therefore, an individual who is considered under the sway of nature alone thinks useful for himself, whether led by sound reason or impelled by the passions, he has sovereign right to seek and to take for himself as best he can, whether by force, by cunning, by entreaty, or by

whatever means will succeed most easily. Consequently he may consider any one as an enemy who wishes to hinder the accomplishment of his desires.

"It follows then that the right and ordinance of nature, under which all men are born and live for the most part, prohibits only such things as no one desires and as no one could attain. It does not prohibit strife, nor hatred, nor anger, nor deceit, nor indeed any of the means suggested by desire."⁴³

To enter a civil state is to surrender at least part of that right. In the state of nature each man's right is broader but his security is far slighter than in a civil state. His power in the former is so far surpassed by the forces arrayed against him that although he has right to all things which he is able to possess, he would not be able to preserve even himself if he had no assistance. The state is formed by a voluntary limitation of the natural right in the interests of security; it must offer at least protection if man is to give up the greater rights he possessed in the state of nature, since "it is a universal law of human nature that no one neglects anything which he judges to be good, except in the hope of a greater good or from the fear of a greater evil."⁴⁴ Man is free, moreover, to break the contract which binds him in the state; he is bound by it only so long as the advantages he derives from participation in the state seem to balance the disadvantages. It makes no difference whether he arrive at his changed opinion for good or bad reasons. The contract by which the state was formed is valid only as long as it is useful; if any of the parties to it should suffer a change of inclination or if any one of them should think no harm will accrue to him from the violation of the contract, there is no way in which he can be prevented from breaking it. To insist on any other force for contracts would be to neglect the fundamental character of desires — emotions can be checked only by stronger and contrary emotions and therefore no one refrains from inflicting evil save through fear of a greater evil.⁴⁵ No pact has any force save its utility, and when that ceases the contract loses validity.

⁴³ *Theo.-Pol.* XVI; III, 189-190.

⁴⁴ *Theo.-Pol.* XVI; III, 191-192.

⁴⁵ *Eth.* IV, 37 sch. II; III, 238.

Even more, everyone has by nature a right to act deceitfully and to break his contracts unless he is restrained by the hope of a greater good or the fear of a greater evil.⁴⁶

The entrance of man into the state in no wise alters the motivations of his actions. He operates by the same natural laws in the state as out of it; his actions are still dictated exclusively by self-interest, but the scope of his activity is now more restrained. "The natural right of every man does not cease in the civil state. For man, alike in the natural and in the civil state, acts according to the laws of his nature and consults his own utility. Man, I say, in each state is led by hope or fear either to perform this particular act or to leave it undone. But the most outstanding difference between the two states is this, that in the civil state all fear the same things, and all have the same ground of security and the same manner of life."⁴⁷ Reason would dictate precisely this arrangement and this ideal, since nothing could be desired by man more excellent for his self-preservation than that all men should agree and that the minds of all should be composed into one mind and the bodies of all into one body, for then all would endeavor with their full power to preserve their being and to seek at the same time what would be most useful to them all.⁴⁸ Such a union of men as they follow reason is, in fact, an integral part of the *Correction of the Understanding*, and so far as men are rational and active this is the very virtue of magnanimity (*animositas*). But the commonwealth is dependent, for the run of men, not on reason but on imagination; its power extends no further than men may be induced to go by commands and threats. Subjects depend on it to the extent that they can be made to fear its power or desire its benefits. It is vain, therefore, for the state to command in men emotions which it has done nothing to arouse, or to insist, for example, that they love that which seems to bring them loss or that they hate that which appears only advantageous. When the state does anything that arouses the indignation of the majority of its subjects, it acts beyond its

⁴⁶ *Theo.-Pol.* XVI; III, 193. Cf. also *Polit.* II, 12; III, 280.

⁴⁷ *Polit.* III, 3; III, 285.

⁴⁸ *Eth.* IV, 18 sch.; II, 223.

rights, for such a command is not in its power, and when it enacts it the state plots its own downfall.

There is no right, no wrong nor any wrong-doing in the state of nature, since all men have right to all things they can acquire. Before the civil state comes into existence a man can do wrong only against himself, for he is not bound to please anyone except himself, nor is he bound to hold anything good or evil, except what he by the laws of his own temperament feels to be good or evil. In the state of nature there is no vice or debauchery and man has a natural right to live irrationally; it is the civil state that defines right and wrong. "Nothing exists in the natural state which can be called good or bad by common consent, since every man who is in the natural state consults only his own advantage and determines what is good or bad according to his own disposition and according as it fulfills his utility, and he holds himself responsible to no one except himself alone by any law. Therefore sin can not be conceived in a natural state, but only in a civil state, where it is decreed by common consent what is good or bad, and each one holds himself responsible to the state. Sin is nothing else than disobedience, which on that account is punishable by the right of the state alone; and in opposition, obedience is set up as the merit of a citizen inasmuch as he is judged worthy by this alone to enjoy the advantages of a state."⁴⁹ With the beginning of right and wrong and the institution of laws, justice too begins, for "justice is constancy of mind in rendering each man that which is allowed him by civil law; while injustice consists in depriving a man under pretense of legality, of that which the law rightfully interpreted would allow him."⁵⁰ In the natural state no one is master of anything by common consent, and therefore nothing can be said to belong to one man rather than to another, but all things belong equally to all men. Consequently justice and injustice, the wish to render each man his own and the wish to take away from a man that which belongs to him, are inconceivable in the natural state. Nothing can be called just or unjust except in a civil state where it has

⁴⁹ *Eth.* IV, 37 sch. II; II, 238.

⁵⁰ *Theo.-Pol.* XVI; III, 196.

been determined what things belong to different men.⁵¹

The function of the state is to guide the activities of its citizens in conformity with such ends; the supreme authorities of any state will direct their subjects much as the mind directs the body. Specifically they will establish laws, interpret them when their meaning is disputed or when their intention is uncertain, decide whether this or that action conforms with them or violates them. It will be the duty of the supreme authorities to judge the actions of every individual in the state, demand of him an account of all that he has done, punish criminals, decide questions of law and appoint jurists whose acquaintance with the law will enable them, with the sanction of the sovereign authorities, to exercise the foregoing functions for them; they will order and use all means that war may be waged effectively and peace established profitably; and they will levy the necessary costs for the disbursement of expenses incurred in all these functions. The state can do no wrong in the exercise of its powers; it can commit wrong only when it suffers anything to be done which may be the cause of its own ruin. But no act of the sovereign can be interpreted as an injustice or wrong toward his subjects. The power of the men amalgamated in the state is centered in the person or persons who acquire the sovereign power; as sovereign they may enforce whatever they wish and restrain anything that displeases them. "The sovereign power is bound by no law, but every one is bound to obey it in all things; this must have been agreed to by all either tacitly or expressly when they handed over to it all their power of defending themselves or, in other words, all their right."⁵² The legislative power in the hands of the sovereign, as also the power of interpreting the laws that have been made, will be unrestrained. The only limitation of the sovereign is his own weakness, for he possesses unlimited right to enforce his will so long as he has the power to effect it; when he is not equal to that "he will rule precariously and no one who is stronger than he will be bound unwillingly to obey him."⁵³ The right of the sovereign is the simple natural

⁵¹ *Eth.* IV, 37 sch. II; II, 238-239.

⁵² *Theo.-Pol.* XVI; III, 193.

⁵³ *Theo.-Pol.* XVI; III, 193. Cf. *Polit.* III, 4; III, 285-286.

right, limited now, not by the power of any one individual but by the power of the multitude which is guided, as it were, by one mind. Consequently even when the sovereign performs an act which is beyond its power and which leads to its own downfall, it violates no civil laws; the vindication of the evil it does is in the laws of war, not in the laws of jurisprudence. If it seems expedient for the general welfare that the contract by which the state was formed be broken, the multitude has the right to resort to arms. The only guarantee against excessive violence (one which often proves ineffective) is that the decision concerning the general welfare rests with no private individual but with him who holds dominion and interprets the law and who is himself bound by no law.⁵⁴

The total subjection of the citizen to the will of the sovereign is not inconsistent with freedom and the use of reason. Freedom is a virtue which consists in the unassisted and unhindered exercise by each man of his own power. But it is impossible for any man to continue his reason always at the highest pitch of possible liberty, since for all his rationality he must still be an individual creature; God alone operates by the same liberty as he exists. Reason in man therefore counsels peace and coöperation which only obedience to the regulations of the state can accomplish. A greater freedom can be obtained if a man respect the laws of his country and obey the commands of his sovereign than if he rely only on his own powers.⁵⁵ The state, however, should be founded on a rational plan and should be directed according to reason, not because the sovereign may not act as he will, but because a state so organized will be freest and its citizens too will be free. That state "is freest whose laws are founded on sound reason; there everyone may, if he wishes, be free, that is, live with full consent under the guidance of reason."⁵⁶ The state itself will be more powerful and independent as it is guided by the precepts of reason and it will be more fully equipped to withstand external encroachments. Two states stand in precisely the same relation to each other as two individuals do in the

⁵⁴ *Polit.* III, 2 and IV, 6; III, 284-285, 294.

⁵⁵ *Polit.* II, 7; III, 278-279. *Theo.-Pol. Annot.* 33; III, 263.

⁵⁶ *Theo.-Pol.* XVI; III, 195.

state of nature save only that the commonwealth is better able to provide itself against oppression. It may make covenants with other states if it sees any advantage in that, and such covenants will be valid so long as the danger or advantage that suggested them remains. For a treaty has no validity after its usefulness to either of its parties has ceased.⁵⁷

The aim of the state is chiefly peace. Means must be sought therefore to prevent any internal disturbances, and particularly to prevent rivalry between subject and sovereign lest their relation to each other become a game of subterfuge and mutual trickery from which anarchy and political faction must eventually emerge to destroy any political advantage in the state. "To guard against all these evils and to form a dominion so that there is no place left for fraud, and finally to frame our institutions so that every man, whatever his disposition, may prefer the public right to his private advantage, this is the task and this the toil. Necessity has forced the solution of many difficulties, but she has never succeeded in framing a dominion that was less in danger from its own citizens than from open enemies and whose rulers did not fear the latter less than the former."⁵⁸

One particular danger to the peace for which the state was formed massed large in the eyes of Spinoza: it is not in the domain of the power of the state to teach doctrines; political instruments and forces should not be used to compel matters of belief. Neither should religion be concerned with doctrines; scientific knowledge is not peculiarly accessible to either the ecclesiast or the politician, and therefore neither should attempt to promulgate truth. Freedom of thought and speech is essential to peace; the *Theologico-Political Treatise* is in fact consecrated to the thesis that "freedom of philosophizing not only may be granted without prejudice to piety and the public peace but further that it may not be withheld without danger to the public peace and to piety itself."⁵⁹ It is enough if religion teaches only piety and charity and if the state exacts only obedience and justice. For either to attempt anything fur-

⁵⁷ *Polit.* III, 14; III, 290.

⁵⁸ *Theo.-Pol.* XVII; III, 203-204.

⁵⁹ Subtitle to *Theo.-Pol.*; III, 3.

ther is for it to endanger the end for which it was designed. Moreover, it is quite beyond the power of the state to enforce an opinion, nor is the frown of ecclesiastical disapproval sufficient to extirpate one. Any intolerance will foment discontent, and if there are suppressions, the very portion of the citizens whose intelligence best qualifies them to be articulate to the benefit of the state will be crushed to silence. "Laws directed against opinions affect the generous minded rather than the wicked and are adapted less for coercing criminals than for irritating the upright."⁶⁰ In the sciences and liberal arts no less than in morality suppression is hurtful, and the best government must permit freedom as well of philosophic speculation as of religious belief.

The government of the ancient Hebrews affords no contradiction to these principles of government. There was no conflict between state and religion in their organization, however, because they surrendered their rights directly to God, and their kingdom was God's kingdom and they God's people. Civil and religious authority both consisted solely in obedience to God, and the dogmas of religion were not precepts but laws and ordinances. "Piety was regarded as the same as justice, impiety the same as crime. Whoever fell away from religion ceased to be a citizen and was accounted an enemy for that alone; those who died for religion were held to have died for their country; in fact there was no distinction between religious and civil law."⁶¹ The government was a theocracy, and the people was chosen of God, not in respect to its wisdom or its tranquillity of mind but merely in respect to its political organization and the good fortune by which it obtained supremacy and held it so many years.⁶² Ceremonies, as the Bible makes sufficiently clear, have reference, not to blessedness, but to the temporal prosperity of the kingdom, for the rewards promised for the observation of the law are temporal advantages and delights. The religion Moses introduced at divine command was designed to the end that the people might be led to do their duty from devotion rather than fear; and no action,

⁶⁰ *Theo.-Pol.* XX; III, 244.

⁶¹ *Theo.-Pol.* XVII; III, 206.

⁶² *Theo.-Pol.* III; III, 47-48.

however slight, was left to the free choice of the subjects in the state Moses founded and sanctified; this was a measure designated to the end that the state might be in least danger from the ungoverned impulses of the Jews and from the degraded ignorance they carried with them from their subjection in Egypt. The people were made entirely dependent on their ruler by the ceremonial law; there was nothing for them but to remember the law, whether they wished to plow or sow or reap, to eat or shave or clothe themselves or even to rejoice. Marks were set on their door-posts, on their hands and between their eyes to admonish them to perpetual obedience.

In modern society, since there is no identification of the political and religious body, there is danger to both state and religion if it be thought that God must be obeyed before all else. The precepts of God can not be contrary to the laws of the state, and nothing can be found in his revelation, when the intention is certain, to conflict or interfere with the functions of political powers. There is however great danger of error in the impossible refinement of religious tenets, and their discussion may lead to social unrest. Therefore the state must have the power to make what laws it sees fit concerning religion. In matters of external rites it can have full authority, for rites can not affect the true knowledge of God nor change charity toward one's neighbor nor alter man's final felicity. The care of the propagation of religion, since it rests naturally with God, should be exercised by the authorities on whom the charge of affairs of state falls.⁶³ Piety itself however and the inward worship of God is within each person and inalienable from him, though the political ruler must have control of outward observances and piety. Freedom of judgment and feeling therefore can never be abdicated. Consequently though religion must conform to the public welfare and though the sovereign alone can judge that, unanimity of thought and speech is not needed for successful government. "Therefore everyone justly concedes the right of free action but not of free reason and judgment; no one can act against the decree of the supreme authorities without endangering their right, but one can feel and judge,

⁶³ *Polit.* III, 10; III, 288-289.

and consequently one may even speak, against their decrees, provided one speak and teach only and provided one do it from reason alone, not from fraud, anger or hatred, or with the intention of introducing some change in the state on private authority." ⁶⁴

Sovereignty may be exercised, according to Spinoza, in three different ways in three possible forms of government — monarchy, aristocracy and democracy. These achieve in varying degrees of success the peace and security of life for which the state was conceived. The first presumption to preference falls to monarchy because of the length of unshaken dominion it has had in the histories of nations. The power of one person however is inadequate to the exercise of the sovereignty, and therefore monarchy requires an aggregation of counsellors, advisors and executives that makes it in reality an aristocracy, and rather more pernicious for being concealed. The expression of the will of the monarch is law; but although every law is an explicit will of the king, not every will of his is law, but only those which he promulgates as such. Since the king is to be the mind of which the state is the body, he must have a council to act as senses apprising him of the conditions of the state. The council may demand accountings of him and submit proposals to him from which he may select what he thinks best for his decree. In his choice he will tend to confirm the opinion which has received the most votes, in order to bind the armed populace to him or perhaps through a fear of the multitude or from a benevolent inclination toward the public good. Advisors should be chosen in such fashion that their private interests will be furthered by general peace; their terms of office should be sufficiently short that all may aspire to the honor which they hold and their number sufficiently large that none may grow too powerful. Justice is to be ministered by a council of jurists appointed to pass on legal disputes. Judges should be too numerous for bribery; their votes should be taken in secret, not openly.

The militia is to be formed exclusively of citizens and none are to be exempt from it. There should be no military pay in times of peace, but those who support their lives by daily labor should be paid in times of war. Comman-

⁶⁴ *Theo.-Pol.* XX; III, 241.

ders and officers will expect no other advantage from war than the spoil of the enemy. War is to be waged, moreover, only that peace may be established and that one may be rid of arms at its conclusion. This aim will be furthered by the fact that the interests of the majority of the council will be such as to lead them to love security and to pursue peace, for no citizen will be permitted the possession of movable property. Furthermore, the existence of a trained and armed citizen body will provide the greatest insurance of liberty, and liberty will remain, since there will be no military pay, the chief reward for all military service. The king will be limited to the citizen body in the selection of his wife, and in order that there may be no swollen body of nobility to endanger the equality of the citizens, descendants of the king except in the case of his heir are to be permitted no lawful marriage. Upon the death of the sovereign, dominion passes, not back to the multitude, but by civil law to his male descendants. The chief advantages of monarchy are the dispatch and rapidity which may be employed in reaching decisions, in ending controversies and in conducting wars. In times of crisis ready mobility may save the state, but if monarchy can boast the greatest expedition in war, democracy is designed to afford the greatest security in peace.⁶⁵

There are some superiorities, moreover, which aristocracy has over monarchy. Whereas kings require counselors, in an aristocracy the council is itself sovereign, and councils are everlasting while kings are mortal. Furthermore, the king may fluctuate in his wishes; sickness, minority or old age may interrupt his reign; but the power of a council has no such interruptions and movements. Indeed dominion conferred on a sufficiently large council approaches nearest the absolute, and it is absolute when it is held by the entire multitude. Aristocracy is distinct from democracy in this, that a person is elected in some way to govern in an aristocracy, but in a democracy the right of governing is either congenital or acquired by fortune.

The will of any large council must be determined more by reason than by lust, since men are drawn apart by evil desires and can be guided as if by one mind only when

⁶⁵ Cf. *Polit.* VI and VII; III, 297-323.

their desires are honorable, in guise at least. The primary law of aristocracy will be concerned with the size of the council, determining the proportion of patricians to the multitude and setting its maintenance at a fixed ratio, preferably about one to fifty. Within the council thus selected the proportion of efficient men will probably be about the same — one to fifty. The smaller council formed of these will pass and repeal laws, choose patrician colleagues and the ministers of the dominion. In order that the constitution of the state be kept intact and that the patricians remain equal in their status, a subordinate council, whose members will be called syndics, will be formed of the elder patricians to watch the operation of the government. Their salaries will be drawn from such sources that maladministration of public affairs would result in personal loss, from such emoluments as head-taxes to determine the population, fees on the election of patricians and fines for their absence from sessions. They will moreover summon the supreme council and hear secret complaints against the ministers of the government. A second subordinate council called the senate, will transact public business and publish the laws of the state. The emoluments of the senators will be such as to encourage peace rather than war, from such sources as revenue taxes. Syndics will sit in the senate without power to vote, to preserve the integrity of the fundamental law. Some portion of the senate will remain in session constantly to transact daily business, and it will be in the discretion of that portion to convoke the senate if it sees necessary. Judges will be chosen from the patricians by the supreme council; their number should be too great to permit bribery and the term of their office too short to permit corruption. The emoluments will be derived from fines and confiscations and aliquot parts of sums at stake in civil suits. Governors to cities and provinces should be chosen from the ranks of the senators. Patricians must be all of the same religion; no religious restrictions will be placed on other members of the state, but though every one is to be given the liberty to express his own opinions, great conventicles are to be forbidden. Any one is, moreover, to be permitted to teach publicly and at his own cost and risk whatever art or science he may wish to. Patricians are

to be marked in dress by some characteristic garment.

Slight modifications of these plans are necessary when the aristocracy includes several cities instead of only one. The organization should be such that each city will be unable to subsist by itself without the rest and thus none will be able to desert the rest without great harm to the dominion. By this device the patricians of each city will be encouraged to maintain and increase their own right both in their city and in the senate, and there will be a stronger guarantee against the possibility of overawing the supreme council.

There is greater security against caprice and injury in an aristocracy than in a monarchy; the constitution of its council makes government by reason somewhat more probable, and the surveillance of the syndics will guard the basic constitution and the fundamental rights. Patricians who become insolvent through luxury or vice will be deposed from the patrician rank; only those who maintain their virtue will remain rulers.

There is still greater stability, however, in the dominion which settles the sovereignty upon the entire multitude. Unfortunately Spinoza proceeded but little way in the analysis of the workings of democracy after he had insisted on that superiority. He defines democracy as the dominion in which a man may have the right to demand the power to vote, whether that right originate in the fact that he was born of citizen parents, or on the soil of the country, or that he deserved well of the republic or that he had fulfilled any other conditions by which the law might happen to grant the right of citizenship. Democracy has no implication of universal manhood suffrage, but is any community in which the rights of citizenship are conferred, not upon certain chosen persons, but upon all who fulfill certain conditions. Beyond stating this characteristic, Spinoza had expressed, when death cut his work short, little more than a prejudice against the exercise of suffrage by women. He founded his conviction on this point on the necessary and inherent weakness of the nature of women. We are left to conjecture what the more detailed institutions of democracy would be from the analogies and contrasts it must have with monarchy and aristocracy.

IV

THE church and the state are thus extremely useful aids to reason. It would be a misrepresentation of the fine rationalism of Spinoza to suppose that because the exercise of reason is the highest power and virtue of man, his perfection should be made to consist in a blank absorption of contemplation. One part of fortitude which is the peculiar virtue of reason is the endeavor, according to the dictate of reason, to help and to join to oneself in friendship all other men. Even further, the wise man will not be unaware of other things which are pleasing and useful. "To make use of things and take delight in them as much as possible (not indeed to nausea, for that is not to take delight) is the part of the wise man. It is, I say, the part of the wise man to refresh himself with moderate pleasant food and drink, and to take pleasure in perfumes, in the beauty of growing plants, dress, music, sports and theaters and in other things of this kind which man may use without hurt to his fellows. For the human body is composed of many parts of diverse nature which continually stand in need of new and varied nourishment, so that the body as a whole may be equally apt for performing all those things which can follow from its nature, and consequently so that the mind also may be equally apt for understanding many things at the same time." ⁶⁶

Since man is not purely rational, there are besides reason these other things which are good for him, the coöperation of men as secured in the state, the interpretation of the will of God in imaginative terms as offered by religion, and all things which may in any way further his perfection of body or mind. The passions too since they mark the transition to greater or less perfection are themselves, in part at least, good. It remains therefore to determine what in the emotions bears advantage to men and what works them evil.

So far as men are rational they follow one common end and each one not only enjoys the good equally with every other, but each will desire for others the good which he

⁶⁶ *Eth.* IV, 45, sch.; II, 244-245.

seeks for himself. Men who live according to the guidance of reason agree in nature and are constant in mind; therein lies the difference between them and men who follow their passions; the latter, since they seek usually a thing which can be possessed by only one man, are opposed to all other men, and they are inconstant in mind since they desire that others love that which they love and at the same time they fear lest they should. Yet among the passions all pleasures are good since they indicate an improvement of the body, and all pains are bad. There can not be too much merriment, and melancholy is always bad; titillation, however, can be excessive, and then grief is good so far as it can restrain titillation. Love and desire, too, can be excessive; hatred can never be good, and therefore the man of reason tries to repay hatred and rage against him with love and nobleness. Partiality and disparagement are always bad, though favor is not opposed to reason but may arise from it; pity is bad and useless in a man who lives under the guidance of reason.⁶⁷ Moreover the goal toward which all these passions are directed is man's higher perfection and his consciousness of greater power; self-complacency is therefore the highest good he can expect. Humility, for this reason, since it indicates no power in man is not a virtue if it does not arise from reason. Repentance, too, unless it arise from reason, is no virtue, for he who repents of an action is twice as unhappy and twice as weak as before his repentance. Great pride and great dejection are both great ignorance of self, and indicate great weakness of mind. Honor need not be opposed to reason but may arise from it.⁶⁸

This is the detailed estimation which Spinoza offers of the good and evil in the passions. If that estimation could be applied to regulating the passions, the problems of ethics would be solved. Unfortunately the passions are not removed by submitting them to intellectual estimation, but ideas give rise to desires and only if such desires are contrary to the passions and sufficiently strong can they remove the passions. Our knowledge of good and evil can never, of itself, change a passion. Obviously the estima-

⁶⁷ *Eth.* IV, 41-51; II, 241-248.

⁶⁸ *Eth.* IV, 52-56, 58; II, 248-250, 253.

tion of good and evil is inadequate knowledge since the mind would form no notion of evil if it had only adequate ideas. It is even more important however that reason has very little power in direct opposition to the passions, in that its notions are general and abstract and the desires that arise from such notions have not the vividness and strength of the desires that arise from present and concrete things. Reason is particularly ineffective if its judgment be opposed to something which is pleasing in the present, since all its ideas are conceived under a form of eternity and the mind is equally affected by them whether they be of a thing past, present or future. "If we could have adequate knowledge of the duration of things and could determine by reason the times of their existence, we should regard things future and present with the same emotion, and the mind would desire, as if it were present, the good which it conceives to be future; and consequently it would neglect a lesser present good for a greater future one, and it would desire in no wise that which was good in the present but the cause of future ill. But we can have only a most inadequate idea of the duration of things and we determine the times of their existence by imagination alone, which is not equally affected by the image of a thing present and one future. Whence it comes about that the true knowledge of good and evil which we have is only abstract or general, and the judgment which we make of the order of things and the connection of causes so as to be able to determine what is good or bad for us in the present, is rather imaginary than real. And therefore it is not to be wondered at if the desire which arises from the knowledge of good and evil, in so far as it has reference to the future, can be more easily restrained by the desire of things which are pleasant in the present."⁶⁹

The conclusion of the Fourth Book of the *Ethics*, preliminary to the power and intellectual accomplishment which are to be the theme of the Fifth, is that man is part of nature and must, therefore, find goods in the order of nature preparatory to the exercise of reason. He can not be wise until he is free and he can not, since he is part of

⁶⁹ *Eth.* IV, 62, sch.; II, 257-258.

nature, be wholly free. Fortunately there is nothing which he does through an emotion which he could not be determined to do through reason, and desires which arise from reason can have no excess.⁷⁰ But these arise in so far as man is active; among the passions, desires are good or bad as they arise from good or bad emotions. In the judgment of any of the particular things which enter into life and fall in the sequence of time and causes, man is among inadequate ideas. If he were born free, not limited and subject to the conditions of life, he would have no conception of good or evil, and he would form none so long as he remained free. But it is meaningless to speak of a man born wholly free, for he is free only in respect to his essence and his freedom is the power of God himself in man — not God in so far as he is infinite but in so far as he is the cause of man's existence. "And this and other points seem to have been meant by Moses in his history of the first man. For in it no other power of God is conceived save that by which he created man, that is, a power by which he consulted only the advantages of man; and thus it is related that God prohibited free man from eating of the tree of the knowledge of good and evil, and that as soon as he ate of it he began to fear death rather than wish to live: again, when man found woman, who agreed most perfectly with his nature, he knew that there could be nothing in nature more useful to him; but that afterwards, when he thought that the brutes were similar to him, he began at once to imitate their emotions and lost his freedom. The Patriarchs recovered this later under the guidance of the spirit of Christ, that is the idea of God. On this idea alone it depends that man should be free and that he should desire for other men the good which he desires for himself."⁷¹

The first important consequences of knowledge then are strength and freedom in action. These are the contributions of reason to the ends that religion and the state try to attain through obedience. Certain of the passions will be impossible in a strong man: he will hate no one, despise no one, and he will in no sense be proud. He will know that all things flow from the necessity of the divine nature and

⁷⁰ *Eth.* IV, 59, 61; II, 254, 256.

⁷¹ *Eth.* IV, 68 sch.; II, 261-262.

he will consider therefore that whatever he thinks to be a nuisance, evil, impious, horrible, unjust, or disgraceful, impresses him as such from the fact that he conceives it in a disturbed, mutilated, and confused manner. He will try to conceive things as they are and to remove obstacles to true knowledge, particularly the passions, such as hatred, rage, envy and others. He will try as much as he can to act well and rejoice.⁷² He will always choose the better of two things that are good, and the lesser of two evils, and he will prefer a greater good in the future to a lesser good in the present. He will never act by fraud but always with good faith; when he lives among ignorant people he will try as much as he can to refuse their benefits for, save that human aid is the greatest that can be offered him, men do not always do that which a rational man would want done. For that reason only free men are truly grateful to each other, for only one who lives under the guidance of reason can judge rightly what a rational man must need.⁷³

The strong man however will not live in the solitude of his own sufficiency, for he must know that the forces about him are stronger than he can hope to be and he must live in a community of men if he is to avail himself of his wisdom. A man guided by reason is more free in a state where he lives according to common law than in solitude where he is subject to no law.⁷⁴ His wisdom will be turned under favorable conditions to living well and wisely. He will be led to desire only what is good and his only impulse will be "to act, to live and preserve his being on the basis of seeking what is useful to him."⁷⁵ His virtue appears first in the ordering of his life to the tranquil fulfillment of his powers and his hopes. It will appear equally great in refusing to face difficulties as in overcoming them, and his wisdom will always be a meditation of life and its ways and never of death and the dread of it. This is the first part of virtue, the living of a good life. In a peaceful state and under the guidance of a good religion this is not difficult: but reason, it is clear already, suggests not

⁷² Cf. *Eth.* IV, 73 sch.; II, 265.

⁷³ *Eth.* IV, 65, 66, 70, 71, 72; II, 259, 260, 262, 263, 264.

⁷⁴ *Eth.* IV, 73; II, 264.

⁷⁵ *Eth.* IV, 67 dem.; II, 261.

only a free life but a higher aim, which is involved in the free life, and a way of knowing which is higher than reason. Two suggestions remain to be followed out: what specifically can reason do to moderate the passions, and what is mental liberty or blessedness? These are problems which have to do, not with the pious, obedient life which all men may lead: this is the best life, reserved for choice spirits, and Spinoza turns to the problems connected with it in the Fifth Book of the *Ethics*.

CHAPTER V

THE INTELLECT

I

WHEN the question of the best life is broached it becomes increasingly clear that ethics must be based on physics and metaphysics. The actual practice of ethics is in a balancing of the emotions. But to know the modifications of the mind in the emotions, involves a profound knowledge of the nature of things. Properly and completely analyzed any thought lays bare the whole of metaphysics and ethics, since one must know from any thought that the understanding first apprehends being, then apprehends itself understanding being, and only then apprehends itself desiring being. The emotions which are the proper subject of ethics are understood only as the nature of the mind is understood, and the mind is determined by the nature of the intelligible universe of which it is a part. Nothing can be known without a knowledge of God, and things are known truly as they are related to God and made to depend on the knowledge of him. Or again, knowing anything the mind must know itself, and to know a thing truly as it proceeds from God is to know it, such is the relation of the mind to God, as it is explained adequately by the mind as formal cause.

If blessedness depends on the operation of the mind, the good man must know at least this much of the nature and properties of the mind. He must know that the circumstances which force man to know some things inadequately make the passions unavoidable; that things which are known inadequately may be taken up by the reason and known adequately in such a fashion that the error is known though it will not therefore disappear. The dependence of the emotions on ideas opens the possibility of their control

by reason but the efficacy of reason over the emotions is peculiarly circuitous. The power of the mind is defined by its knowledge; its weakness or passion by privation of knowledge, that is, by knowledge which is inadequate. The emotions which make up that weakness must remain, since some of man's ideas must be inadequate; man must as a finite body be acted upon by other bodies; the emotions take their force from the power of those external causes compared with our power. As soon as the nature of the emotions and of knowledge is known, it is realized that the solution is not in the direction of squeezing the emotions from the mind by a tight stoic will. There are indirect ways in which the reason may oppose harmful emotions.

The mind, however, can have no absolute power over the emotions. Knowledge, particularly the third kind of knowledge which is based on the knowledge of God, can accomplish two things relative to the emotions, although it can not remove them entirely in so far as they are passions: it can bring it about that they constitute the least possible part of the mind and it can give rise to a love directed toward an immutable eternal thing of which, from the nature of knowledge, we are masters; that love will be free from the evils which are in common love and will eventually grow to occupy the greatest part of the mind. This is a solution determined by the constitution of the mind itself and the nature of its union to the body; whatever power the mind has over the passions goes back to the fact that the mind is the same individual thing as the body, and the difficulties it sometimes has in arranging its modifications arise from the existence of a contrary order of modifications in the body — in a word, an intelligent science of ethics is possible in so far as the emotions of the mind can be dissociated, by the thought only of the nature of the emotions and of the world in which they are possible, from the thought of the external causes which lead to them.

The mind's power over the emotions consists in whatever rearrangements it can effect that emotions be made to depend on an idea wholly in the power of the mind rather than on a cause which is fortuitous and in the order of nature. Spinoza enumerates five distinct aspects of this

power.¹ First, one has power over the emotions through the knowledge itself of the emotions, for an emotion ceases to be a passion as soon as one forms a clear and distinct idea of it. But the emotion itself is an idea of the imagination; the idea of the emotion will be distinguished from the emotion itself as idea, in that it will have reference to the mind alone and by reason alone. Therefore the better the emotion is known the more it is in one's power and the less the mind is passive to it.² Every man, moreover, may have such a knowledge of his emotions from his very nature and constitution, since there is nothing from which some effect does not follow and whatever follows from an adequate idea in us we understand clearly and distinctly. No one can be wholly ignorant of his own nature and therefore every one has the power of understanding himself and his emotions, if not absolutely at least in part, clearly and distinctly.

The second aspect of the mind's power over the passions is involved too in knowing the emotions: the fact that emotions may be removed from the thought of external causes which we imagine confusedly. Each emotion can be understood clearly and distinctly, and the conditions of its increase can be known. Then when the emotion occurs it will be connected by the mind, not with the accidental things which led to it, but with things which the mind perceives clearly and distinctly and therefore acquiesces in entirely. The emotion is thus separated from the thought of an external cause and united to true thoughts. Love and hatred toward anything and even the wavering of the mind between love and hatred can be removed, if the emotion or disturbance of the mind can be shifted from the thought of an external cause to other thoughts. Moreover the appetites and desires that arise from those thoughts can not be excessive. This is to say that, once the nature of the mind and its powers and weaknesses are known, situations which would have led to passions will lead instead to a full comprehension of what is involved and to intelligent and proper action. The wise man will act differently from the same motivation and in the same circumstances than

¹ *Eth.* V, 20 sch.; II, 293.

² *Eth.* V, 3 dem and cor.; II, 282.

a foolish man; the same desires lead, because of the different ideas to which they are attached, to different actions. "For it must be noted above all that it is one and the same appetite through which a man is said to be active and passive. For example we have shown that human nature is so disposed that each one desires that others live according to his idea of life: and this desire in a man who is not led by reason is a passion which is called ambition and which differs very little from pride; and on the other hand in a man who lives according to the dictates of reason it is an action or a virtue which is called piety. And in this manner all appetites or desires are only passions in so far as they arise from inadequate ideas, and they are accredited to virtue in so far as they are excited or generated by adequate ideas."³ This remedy for the emotions, which consists in knowing them, is the most effective one in our power, since the mind alone can cope with the emotions, and the mind's chief power is in thinking and in forming adequate ideas. This power, moreover, is furthered not a little by the fact that reason knows things under the aspect of necessity. Emotions are greatest, other things being equal, toward a thing we imagine simply, without qualification of necessary, possible or contingent; when a thing is known to be necessary the emotion toward it is diminished by the knowledge and therefore since reason understands all things as necessary it may control the emotions and be less passive to them in the degree that it applies its knowledge. "We see the pain caused by the loss of some good to be mitigated as soon as he who lost it considers that it could in no manner have been preserved. Thus also we see that no one pities an infant because it can not talk, walk, reason, or lastly that it lives so many years as if unconscious of self. But if most men were born full-grown and only one now and then an infant, we should pity each infant: for then we should regard infancy not as a thing natural and necessary, but as a flaw or mishap in nature."⁴

A third aspect of the strength of the reason is in the fact that it deals with common notions of things. The common properties of things which we know by the reason must

³ *Eth.* V, 4, sch.; II, 283.

⁴ *Eth.* V, 6, sch.; II, 285.

always be regarded as present and are imagined always in the same way. This is in one view a weakness of reason, since any passion excited by a present and actual cause can easily have greater force than an emotion that proceeds from common notions. But on the other hand the emotion connected with reason will remain the same and will not alter or change, since reason always envisages the properties of things in the same way. Therefore, whenever the external cause of contrary passions is absent, so that they are not aided by their causes, they may be made to accommodate themselves more and more to the emotion of reason. If time is taken into consideration, emotions aroused by reason are greater than those which are referred to individual things which we regard as absent.⁵ In time again emotions toward a thing which we understand surpass emotions which are excited by things which we conceive confusedly and in a mutilated manner.

A fourth element of strength appears in that emotions which are dependent on the common properties of things find their causes and supports scattered on all sides and in all things. There is "a multitude of causes by which the emotions which have reference to the common properties of things or to God are fostered."⁶ The permanence and durability of emotions toward things which we understand depends on their reference to the common properties of things which are always the same and which are consequently encountered by the mind repeatedly; "the more an image has reference to many things, the more frequent it is, the more often it flourishes and the more it occupies the mind."⁷ Moreover, the very quality in such emotions which makes for their durability guarantees further that they must be good; emotions that are aroused by properties that appear so generally must be good in that they indicate the nature of things more fully and therefore they must lead to the higher perfection of the mind since they effect a broadening rather than a restricting of the range of the mind's contemplation; "an emotion is bad or harmful only in so far as the mind is prevented by it from think-

⁵ *Eth.* V, 7 and dem.; II, 285-286.

⁶ *Eth.* V, 20 sch.; II, 293.

⁷ *Eth.* V, 11; II, 289.

ing.”⁸ Harmful emotions detain the mind and restrict it to one object alone or to some few objects, but an emotion which depends on many different causes is least restricting, and there is less danger in it since we are less affected toward each cause. This is only to say again that in regard to things which we understand we are less passive and more active.

Then in the fifth place the intellect can arrange its emotions and connect them one with the other. Knowledge of the nature of the emotions and their dependence on things will permit an arranging of them in an order suggested by that knowledge — that is, an order which is not dependent on the chance which led to them but on the perfections and on the consequences in the human mind and body which are indicated by them. This arrangement of the emotions must be according to man’s good, and it will be effective so long as he is not assailed by emotions contrary to his nature. Moreover, since there is always the same connection in the thoughts of the mind and the modifications of the body, it is inevitable that, when the modifications of the body are determined largely by the batterings it receives in the haphazard flow of things, the sequence of thoughts will also be haphazard in the mind. The causes of the body however are not only in the flow of nature but in a perfect essence (in the same sense as the cause of fire is fire itself as well as, say, the lighting of a match), and so the thoughts of the mind may be ordered to the same principle from which the mind too is derived. To know the nature of things is to order the modifications of the body and the emotions of the mind according to their essential causes, and it is therefore to free them somewhat from the power of accidental causes.

The passions may run contrary to the emotions arranged thus in their intellectual order. But in this intellectual order the emotions have much more power than if they were vague and uncertain, and therefore greater force is required to hinder them. This is a power derived wholly from the knowledge of our emotions. But as long as we have no perfect knowledge of our emotions, there is an-

⁸ *Eth.* V, 9 dem.; II, 286.

other way to deal with them; virtues may derive their force from and be founded on habituation instead of knowledge. Some manner of right living and certain rules of life can be set up and committed to memory; if they are applied frequently to the occurrences of life they will enter into the imagination so strongly that at all particular exigencies they will be present to us vividly. This is the function which reason can fulfill on the plane of action and to the end to which the state and religion work; an Aristotelian would have differentiated this function of reason by calling it the practical intellect; by habituating ourselves to action according to a certain rule, our automatic response will be toward a rational end even when we do not consider the end. Spinoza illustrates this by the instance of hatred: among the rules of life is one that hatred must be overcome by love or nobleness, not requited by reciprocal hatred. But in order that this rule might be always ready for us when we need it, and that we may never be surprised into hatred, we must often think and meditate on the common injuries done to men and consider by what method they might be avoided by nobility of character. If we can by such meditations effect an association of injuries to this rule, we shall be ready to follow the rule on all occasions. Our imagination will be prepared by this attitude for any injury that may befall; by it we are able to have constantly in mind a regard for our advantage and the good which follows from mutual friendship and common intercourse; this is aided by our awareness that complete mental satisfaction (*animi acquiescentia*) arises from the right way of life, and that men, like other things, act according to the necessity of nature. Any injury that may occur and any hatred that may arise from injuries will then occupy a lesser place in our imagination and will be easily overcome, or in the case of the greatest injuries, if the rage is not overcome easily, it will nevertheless be overcome, with some wavering of the mind, in a shorter time than would have been necessary without meditation on these things.

Meditations of this sort may be used to order other passions as well as hatred, so that in the moment of the crisis, the decision is ready for us. So courage is possible and fear is laid aside if we enumerate and imagine the common

perils of life and the way in which they can best be avoided and overcome by courage. Such an ordering should have to do entirely with the good in things, according to which they can be so ranged that our thoughts and images will be determined by that order alone and our actions will be determined by an emotion of pleasure. "For example if anyone sees that he seeks fame too eagerly, let him think of the right use of it, to what end it should be sought, and by what means it may be acquired: but not of its abuse and vanity, and the inconstancy of man, or of other things of this kind, of which no one ever thinks save from an unhealthy mind. For ambitious men are assailed most with such thoughts when they despair of attaining the honor they long for, and while they utter forth their rage they wish to seem wise. Wherefore it is certain that they desire honor or glory most who cry out loudest of its abuse and of the vanity of the world. Nor is this a quality of the ambitious only, but of all to whom fortune is unfavorable and who are powerless in mind. For a poor man who is greedy will not cease to talk of the abuse of money and of the evils of riches: by which he does nothing else than distress himself and show others not only his own poverty, but also that he can not bear to see others rich. Thus those who are badly received by their sweethearts think of nothing save the fickleness, deception and the other often lamented faults of womankind, all of which however, they immediately forget as soon as they are well received again. He therefore who tries to moderate his emotions and desires from a love of freedom alone—he, I say, endeavors as much as possible to obtain a knowledge of the virtues and their causes, and to fill his mind with that joy which arises from a true knowledge of them, but by no means to regard the vices of men, to disparage men, or to rejoice in a false species of liberty."⁹

The function of knowledge, then, in relation to the passions is not to bring about that they are destroyed entirely as passions but only to effect that they constitute the least possible part of the mind. Knowledge is able to do this most naturally; the more thoroughly we know the nature of the emotions and the more we have bound, by prac-

⁹ *Eth.* V, 10, sch.; II, 288-289.

tice and meditation, the various contingencies possible in life to their proper rules, the more ready we are to act well. Images of things newly experienced are then associated with things we have already experienced, and in that process reason has the tremendous advantage in that it is easier to associate images of things with images which we refer to that which we understand clearly and distinctly.¹⁰ Furthermore an image will flourish more frequently when it is associated with many other things; the strength of reason is that the common properties of things with which it deals recur frequently, while the strength of the intellect is that it knows things as they flow from an attribute of God; all ideas and all modifications of the body may be ordered with reference to the idea of God.¹¹ The more completely this ordering is accomplished by the mind the more complete will the power of the mind be, and the dominion of the passions will be closely limited.

II

THIS much has had to do with the purely negative aspects of ethics — with the avoiding of calamity, rather than with the attaining of perfection. Defenses have been set up to forestall the disintegrations which threaten the power of the body and the mind; religion and the state are instituted to preserve peace and tranquillity, and reason has been employed to set up working rules of conduct in order that the passions may constitute the least part of the mind. But these negative and protective devices foreshadow man's mental freedom and blessedness (*mentis libertas seu beatitudo*); in fact at bottom it is the same power of the mind which enables man to guard against the emotions, and which leads to his blessedness. The protection of the mind against the emotions consists in knowing them, and the best protection is in knowing them in reference to God. To understand oneself and one's emotions is to know God as he is manifested in them, and to know God is to love him. Even the knowledge of individual things leads to a knowl-

¹⁰ *Eth.* V, 12; II, 289.

¹¹ *Eth.* V, 14; II, 290.

edge of God and the more we understand individual things the more we understand God.¹² Modes are related to God not only in that they owe their existence to him but in that they are truly parts of the intelligible universe; the most transitory thing is more than mere evanescent appearance, since to be at all it must involve an essence. Any modification of the body therefore or any passion, since it fall properly in the sphere of the mind's knowledge, implicate the essential nature of things, and knowledge of them will advance the mind's knowledge of God; "there is no modification of the body of which the mind can not form a clear and distinct conception."¹³ To understand the nature of anything is to participate in the nature of God; the thing which is known, as here the passions, is not known in the kaleidoscope of infinite causes operating in infinite manners, but in its essential nature, and that is not to be fixed in history at any time or localized at any point. Events which happen in time are not the explanation of things, since they do not treat the nature of things. "Things are conceived as actual by us in two ways: either in so far as they exist in relation with a certain time and space, or in so far as we conceive them to be contained in God and to follow from the necessity of the divine nature."¹⁴ These are the two ways in which the mind as idea of the body may conceive things through the body; it may be concerned with the actual existence of the body or it may be concerned with the essence implicated in the body; it may know things by imagination or by reason, in time and space or in eternity, as they lead to passion or to action, and as they are involved in numberless causes or as they lead back to God from whom as from a single source they were derived and to whom they can be ordered by the mind.

This is man's highest perfection, to know God, and all other powers of the mind depend on the knowledge which is possible only by knowing God. It appertains to the very essence of the human mind to have an adequate knowledge of the eternal and infinite essence of God, and "the greatest good of those who follow virtue is to know God."¹⁵ To

¹² *Eth.* V, 24; II, 296.

¹³ *Eth.* V, 14 dem.; II 290.

¹⁴ *Eth.* V, 29, sch.; II, 298-299.

¹⁵ *Eth.* IV, 36 dem.; II, 234.

free oneself from passions by reason is to start on the path to intellectual perfection, and therefore to desire to lead a good life free from passions is to be led to the further desire for a perfect life. "It is therefore extremely useful in life to perfect as much as we can the intellect or reason, and in this alone does the supreme happiness or blessedness of man consist: for blessedness is nothing else than the satisfaction of mind which arises from the intuitive knowledge of God. But to perfect the intellect is nothing else than to understand God and his attributes and the actions which follow from the necessity of his nature. Wherefore the ultimate aim of a man who is guided by reason, that is, his greatest desire by which he endeavors to moderate all others, is that by which he is brought to conceive adequately himself and all things which can come within the scope of his intelligence."¹⁶ The proper exercise of the intellect is nothing other than to know God, since to know adequately the things which are within the power of the mind is to know God. But a partial knowledge and awareness of the nature of God will turn the mind to the acquisition of a fuller knowledge, since knowledge varies in perfection with the perfection of its objects; when it seeks its own perfection the greatest endeavor of the mind and its greatest virtue is to understand things by intuition, the third class of knowledge.¹⁷ It is significant that the desire for such knowledge can arise from knowledge of the second kind, reason, but not from knowledge of the first kind, imagination. Knowledge of the properties which things have in common can lead to a knowledge of things ordered to their source; knowledge of the accidental conditions of the existence of things or of their effect on us can never of itself suggest the true nature of things or the manner of their derivation from God. Moreover, as reason gives rise to a desire for this kind of knowledge, so also, the further one proceeds in knowledge of this kind the more one desires to understand.

On all scores intuitive knowledge is our highest good. "Inasmuch as the intellect is the better part of us, it is certain that, if we wish to seek what is truly profitable to us,

¹⁶ *Eth.* IV, *App.* IV; II, 267.

¹⁷ *Eth.* V, 15; II, 290.

we should try above all things to perfect it so far as we can. Our highest good indeed should consist in intellectual perfection. Now, since all our knowledge, and the certainty which removes every doubt depends solely on the knowledge of God, as much because without God nothing could be nor be conceived, as because we may doubt concerning all things so long as we have no clear and distinct idea of God — it follows thence that our highest good and perfection depends solely on the knowledge of God. Further, since nothing could be or be conceived without God, it is evident that all things in nature involve and express the conception of God as the reason for their essence and perfection, so that we acquire greater and more perfect knowledge of God in proportion as we understand natural things more: or (since the knowledge of an effect through its cause is the same as the knowledge of some property of the cause) the greater our knowledge of natural phenomena, the more perfectly we understand the essence of God (which is the cause of all things). So then, all our knowledge, that is, our highest good, not only depends on the knowledge of God, but consists in it wholly. It follows further from this, that man is perfect or the reverse in proportion to the nature and perfection of the object which he loves before all others; he is necessarily most perfect and participates most in the highest blessedness who loves above all else the intellectual knowledge of God, the most perfect being, and delights particularly in it.”¹⁸

It is no additional step from the knowledge of God to the love of him, since love is to enjoy a thing and be united to it, or more precisely, it is the consciousness of a transition to a higher perfection accompanied by the idea of an external cause. There is no greater perfection for man than knowledge, and though human knowledge begins in the knowledge of the modifications of the body, one is led inevitably, if that knowledge is analyzed to the full, to a love of God; the more one understands oneself and one's emotions, the more one loves God. That love can not be polluted by the evils of common love; it will be increased by all things we know adequately and by the love we see in other men for God; it will require no reciproca-

¹⁸ *Theo.-Pol.* IV; III, 59-60.

tion and return of love to us, since God is free from passions and unaffected by pleasure or pain.¹⁹ The love which we conceive for God is the very love with which he loves himself. God must love himself since he knows himself and his love is an infinite intellectual love. The intellectual love of man toward God is part of that love which unites the universe into one intelligible thing; man's love for God is God's self-love so far as God can be expressed through the essence of the human mind.

There appears consequently a third aspect of the power of the intellect. The intellect is able to free man, at least in part, from the passions; it constitutes his perfection; now it may be seen as his salvation. In fact viewed in metaphysical cross-section, the three, salvation, blessedness and liberty are the same (*salus nostra seu beatitudo seu libertas*) and consist in the knowledge and the constant and eternal love for God. In line, then, with the nature of the intellect, Spinoza expounds a doctrine of immortality. It has all the marks of the averroistic doctrine with which he was doubtless familiar by way of Maimonides; it is an immortality of the part of us which can come into contact with the eternal essences which depend on God; Averroës would have called it the active intellect which is the same for all men; but certainly it is not a personal immortality.²⁰ The mind is eternal in so far as it conceives the essence of the body, for then it knows a changeless and eternal thing and its own essence consists in that unchanging knowledge. The mind in so far as it has adequate knowledge of the essence of its body may reach adequate knowledge of the eternal things on which it depends, and therefore intuition, the third kind of knowledge, in which ideas are ordered toward God, depends wholly on the mind as its formal cause. It is part of the essence of the mind to have an adequate idea of God, precisely because it is an intelligent element of an intelligible whole in which each part is what it is because of the whole,

¹⁹ Cf. *Eth.* V, 15, 17, 19; II, 290, 291, 292.

²⁰ There have been critics to maintain that the immortality is of the individual soul. Cf. Sigwart, *Spinoza's neuendeckter Tractat*; pp. 81-83; Paul Janet, *Dieu, l'homme et la beatitude*, p. xlv; and Victor Delbos, *Le problème moral dans la philosophie de Spinoza*, p. 193, ". . . il apparaît que sa doctrine aspire avant tout à affirmer la vie éternelle de l'individu, et qu'elle transforme ainsi très profondément la théorie aristotélicienne."

and each part can trace out something of the nature of the whole from the impress in itself; Spinoza expresses this by saying that there must be granted in God the idea which expresses the essence of each individual body under a form of eternity.²¹ Since the idea which so expresses the essence of the body appertains to the essence of the mind, the mind is therefore to that extent eternal. But such an immortality requires that when the body is destroyed all the ideas which refer to the present existence of the body be destroyed. Imagination, memory, and even abstract ideas will disappear with the dissipation of the body, and consequently all knowledge which referred to individuality and to the things which influence and support individual life will be lost. Men are conscious of the eternity of the soul, but they confuse it with duration, and therefore instead of attributing it to the understanding they assign it to memory and imagination; they suppose these to endure after death and consequently they consider immortality to be a continuation of this personal existence. "But the mind no less feels those things which it conceives in understanding than those which it has in memory. Indeed the eyes of the mind by which it sees and observes things are proofs of this."²² The eternal things which the intellect knows are real and, in the sense that essences are to be opposed to existences, are distinct from the changing things that occupy the imagination and the memory; knowing eternal things it must love them and share their eternity. The imagination will have less power in the degree that such knowledge increases, and the mind will therefore be less passive to emotions that are evil; particularly it will fear death less since death will affect only the ideas of its imagination and memory. The human mind may put on such a nature that the part of it which will perish with the body may be of no moment to it in respect to what remains.²³

No love save the intellectual love is eternal; the mind will have passions only so long as the body lasts. This is not immortality as it is commonly conceived, but neither is it an ascetic derogation of the body and of the temporal things

²¹ *Eth.* V, 22; II, 295.

²² *Eth.* V, 23, sch.; II, 296.

²³ *Eth.* V, 38, sch.; II, 304.

which are connected with the body. It insists only that for anything to be, even in time, it must involve a nature or an essence which is eternal. In the case of man the one hope for freedom as well as for happiness is to subordinate all aspects of the mind to that which expresses its essence. This is not to turn from things of the body to those of the mind, since what has been said of the mind is true equally of the body: the power of the body depends on what it is, not on what is done to it, and therefore like the mind it may be advanced by other things, but it is best advanced by the actions which proceed from its own nature. Mind and body are the same thing and even though some part of the mind persists after the destruction of the body, it owes that power of persistence to its relation to the body; "he who has a body capable of many things, has a mind of which the greater part is eternal."²⁴ The origin of the mind is in the actual existence of a body of which there is an idea in the thinking attribute. The career of the mind is in discovering in the attribute of thought the implications of the idea of its body, and consequently its eternity consists in that it may, as an idea in the thinking attribute, know the ideas on which it depends and to which it is related; thenceforth its being may be made to depend on the intelligibility of which it is a part rather than on the existent body with which it was first connected. So far as we understand, it is the essence of the idea of the body which is involved, not its existence. "Our mind in so far as it understands is an eternal mode of thinking which is determined by another eternal mode of thinking and this one again by another, and so on to infinity: so that they all constitute at the same time the eternal and infinite intellect of God."²⁵ The intelligibility of the world is not separate from the world itself, and therefore there are the elements of eternity in changing things; the mind becomes eternal to the extent that it seizes on the eternal things its nature involves.

The problems of ethics arose from the circumstances of eternal essence involved in the flow and shift of things; the elements of these problems are found most conspicuously in the fact that things are in a course of constant change

²⁴ *Eth.* V, 39; II, 304.

²⁵ *Eth.* V, 40, sch.; II, 306.

although the nature of things never changes. But in man alone there is an awareness of the problem since he knows the modifications of himself, and knowing them knows himself and God. His task is to resist all changes in the order of nature except those which will help him preserve his nature at its highest perfection: his one instrument to accomplish this is the knowledge of the changeless and infinite nature of things, which the emotions themselves may be made to increase. To attempt this task is to strive for happiness; in its most effective form, such is the nature of the universe, the striving consists at once in avoiding passions, in developing the body and the mind, and in loving God. "We live in continuous variation, and according as we change into better or worse we are called happy (*felices*) or unhappy (*infelices*). For he who is changed from an infant or a child to a corpse is said to be unhappy, and on the other hand, it is to be ascribed to felicity that we may be able to go through the whole space of life with a healthy mind in a healthy body. And in truth, he who has a body, as for example an infant or a child, capable of the least number of things and mostly dependent on external causes, has a mind which, considered in itself alone, is scarcely conscious at all of itself, or of God, or of things: whereas, on the contrary, he who has a body capable of many things has a mind which, considered in itself alone, is highly conscious of itself, of God, and of things. In this life then we endeavor principally to change the body of an infant, in so far as its nature allows and is conducive thereto, so that it may be capable of many things, and so that it is referred to a mind which is very highly conscious of God, itself, and things; or so that all that which has reference to its memory or imagination should be scarcely of any moment whatever in respect to its intellect."²⁶

Even if mind were not eternal, a good life should be no different than it is in view of the mind's eternity. The only basis of virtue and the one principle of wise and right living is the seeking of what is useful to oneself. We should still, if we did not know our minds to be eternal, act according to our own interests and if we consulted our true

²⁶ *Eth.* V, 39, sch.; II, 305.

interests, we should follow the precepts of religion and piety, and our actions would be directed no less according to high-mindedness and magnanimity.²⁷ What we do according to reason would be no less useful to us, if we did not realize that by it our minds are made in large part eternal. It is again the advantage of the mathematical demonstration, in which ethics follows as a consequence on physics and metaphysics, that the virtue of the mind by which it resists passion is seen to be the same virtue by which it asserts its own continued existence and the continued existence of its body, and that the mind is, by that same virtue, for the most part eternal. The common run of mankind separates these three and imagines that freedom consists in following every unrestrained impulse and that to live according to the divine law is to lose one's right. Consequently piety and religion and all the things which have to do with the strength of the mind seem to them burdens which must be borne till death when they will be laid aside for the reward of this servitude. Instead of acting by the strength of the mind and to perfection they are led to live according to the divine laws by a hope of reward after death or by a fear of dreadful punishments. "If this hope or fear were not in men, but if they thought on the other hand that their minds were buried with their bodies, and that there did not remain the hope of longer life for wretches worn out with the burden of piety, they would return to life according to their lust and obey fortune rather than themselves. This seems no less absurd to me than if a man, because he believed that he could not keep his body alive forever with wholesome food, should forthwith seek to glut himself with poison and deadly foods; or that a man, because he saw that his mind is not eternal or immortal, should prefer to live without any mind at all: this all seems so absurd to me that it scarcely deserves to be refuted."²⁸

The proposition with which the *Ethics* ends is in a way the keynote of the whole demonstration. Virtue is itself its own reward. "Blessedness is not the reward of virtue, but virtue itself, nor do we enjoy it because we restrain our

²⁷ *Eth.* V, 41; II, 306.

²⁸ *Eth.* V, 41 sch.; II, 307.

lusts, but, on the contrary, we can restrain our lusts because we enjoy it.”²⁹ There is no higher goal to which virtue could strive: it is the highest happiness, and it offers the surest resistance to the passions. The knowledge of this is the whole wisdom and strength of the wise man. The ignorant man is guided by lust alone and is agitated in many ways by external causes and never enjoys the true satisfactions of the mind; he lives almost unconscious of himself, of God, and of things, and as soon as he ceases to be passive to things in this fashion, he ceases also to be. But the wise man knows himself and God and things by an eternal necessity; he knows with an adequate knowledge and he acts largely by his own power and according to the necessity of his own nature; in his knowledge and actions he enjoys an unending satisfaction of the mind and since he has concerned himself and has involved himself in things that do not change or perish, he can never wholly cease to be. His whole strength depends on the knowledge he has of things and of his own nature; the course which the demonstrations of the *Ethics* has run from God through the mind and its passions and back to the intellect, has traced the necessity in nature by which such scope and powers fall to the intellect in only knowing itself.

²⁹ *Eth.* V, 42; II, 307.

CHAPTER VI

THE UNITY OF SPINOZA'S THOUGHT

SPINOZA, perhaps more than any other great philosopher, directed all his work to a single unvarying aim. The question of how man shall live to realize his best potentialities is never far from any problem on which he embarks. Politics, theology as it enters in the governance of man and as it affects his freedom, man's beatitude and the correction of his understanding, all these are indicated in the titles of his major works; the book which contains his fullest reflections was called an ethics and his other writings build out only practical ramifications to his central doctrine; problems which he promised to take up in his "philosophy" are treated in the *Ethics*. In its general outlines the unity of Spinoza's thought is obvious; it is not difficult to state the system of his philosophy within the limits of a thousand words, but when the investigation becomes more precise the single aim is lost among the confusion of the detailed problems through which it threads. It is clear that ethics must be based on metaphysics and physics, but since Spinoza did not trouble to treat metaphysical, mechanical, methodological problems separately, but only as they are the necessary preparation to ethics, the complications which have come out of this introduction to ethics have attracted rather more attention than has the incidental elucidation. Questions of method, science, or ontology seem to have interested Spinoza chiefly as they were relevant to ethics and he treated them only in such detail as that interest warranted; that it warranted considerable detail followed from the nature of the problem which required such sciences as introduction. Nevertheless these preparations do not always seem to have been sufficient to make his view clear, since there has been no paucity of readers who find in them only a misapprehension of the nature of God, or of the exigencies of the mathematical method, or of the efficacy of the laws of nature, the relation of body and mind, the psychology of the passions and of

thinking, or the niceties of any of the dozens of philosophic or technical disciplines in which one reader or another might presume to expertness.

The work of Spinoza, consequently, so far as it needs supplement, calls for the service of disentangling this aim from all the contradictions and confusions in which it has been involved. Even that service involves at first sight a contradiction: that the salient characteristic of a work should be its unity and that the unity of it should have been most frequently overlooked. The contradiction is only in seeming. The unity which is most obvious in Spinoza's work is in the preoccupation which runs through the whole body of his thought. But no great philosophic importance could be attached to a unity of purpose, if the mass of materials and problems through which the investigation proceeded did not form itself in such wise that ethics becomes a selective compendium of all knowledge as it contributes to the knowledge of man. Beside the unity which a single purpose gives the philosophy of Spinoza there is the basis of a logical unity. The system of his philosophy is indicated at every important point, but nowhere in his works is it stated in itself and without the bias of its moral tendencies. What is apparent is a perspicacious philosophic awareness of the diverse layers of implication that can be found in any philosophic problem. But the very acuteness of the perception betrays the exposition, since Spinoza usually sees more than he can induce his reader, even with a scholium and a cross-reference, to see; perhaps if he had finished the physics he had planned, the frequent logical reservations and provisions which he introduced with a *quatenus* in all statements of actual things would be clearer. But they would be clearer only by introducing further aspects of that one distinction between the existence and essence of things, between imagination and knowledge, passion and action, duration and eternity, mode and substance, in a word, between the thing as it exists and changes and the thing as it is and persists in being.

This logical unity, more than the persistent unity of purpose, is of philosophic interest in Spinoza's work. It deserves emphasis because it is a unity evolved rather by philosophic vision than by organization or argument. It

is not the unity of an outlined presentation, but rather the peripatetic unity of a conversation which progresses and in which the interlocutor remembers what was last said. The logical unity of this doctrine, therefore, fits nicely to the single purpose; not only is ethics based on physics and metaphysics but that basis is constantly in mind and its principles do not change. Eventually, as the exposition proceeds, that very changelessness becomes so directly relevant to the solution of the problems of ethics that the unity of the doctrine no longer appears as an accidental characteristic; man's best possibility of happiness is in the recognition of essences involved in and implicated in the existence of things.

It is no contradiction that this man in whom the unity and system of thought is so striking, should never have completed a single work. Of the two books he published in his lifetime, one, the *Principles of Descartes's Philosophy*, contains a fragmentary Third Part which is frankly uncompleted because the Second Part does not include the necessary proposition on fluidity; the other, the *Theologico-Political Treatise*, though it is a finished work, is poorly planned if it was to be (as its subtitle, introduction and concluding chapters seem to indicate) a work on the relation of reason and faith with particular practical application to religion and state, and not primarily a work on biblical criticism. The *Short Treatise*, at least at it comes to us, is a fragment; the *Political Treatise* and the *Correction of the Understanding* are incomplete. Moreover the latter ends abruptly in what seems a colossal logical derangement: beginning with a beautiful statement of its problem, it proceeds, with the interposition from time to time of statements of what has been done up to that point, of what does not fall in the province of this treatment and what remains to do, to so indiscriminate an interest in the bypaths that open along the road to the correction of the understanding that one could enumerate, at the point where it does stop, a dozen subjects which might conceivably have followed the last one. And with the spectacle of the dilemmas of all these works, one may be emboldened to the suggestion that even the *Ethics*, though Spinoza was ready to publish it and though by its scope and its method it is the most sys-

tematic and elaborately organized of his writings, is an incomplete work; certainly Books IV and V are open to criticism from the point of view of both organization and comprehensiveness. Spinoza's seems to have been a mind of remarkable logical sagacity, not for the architectonic presentation of ideas, but for profound and detailed analysis. The unity of his thought is properly in the principles to which he appealed unceasingly and in the systematic background of his thoughts.

In the moral application which interested Spinoza so persistently, this systematic unity appeared in the reiteration of his insistence that the life of man proceeds simultaneously along two ethical planes. Good action and intelligent action are impossible without enough understanding of God and of bodies and of the mind to make clear what is implicated in the existence of anything and in the continuance of anything, idea or essence, through change. Here are the distinct ways of knowledge, the classification of the emotions, and the relation of passion and intellect on the background of an intelligible universe in which every occurrence results from necessary causes operating according to unchanging principles. The most important philosophic convictions of Spinoza are these, and even in the *Short Treatise*, where the doctrine of the attributes is a little uncertain still, and the distinction of body and mind and their identity is not quite decisive, where the psychology of the passions is detailed shortly in a mere cartesian enumeration, and where the intuitive culmination to the rational ethics is not developed, there is a statement of this relation of God to the universe which is an explicit and as definitely crucial as any statement of it in the later works. God is ubiquitous in the writings of Spinoza because the world is intelligible, and that he should be necessary to the understanding of any part of it follows from any explanation of his nature.

Place man in the universe of contrasted things that depend on and illustrate the rationality of God, and there is the inevitable sequence of passions. The ethical problems follow as a consequence involved in them. Seen in this light the problems are clearer: the real evils of the world are not poverty, neglect, pain or any of the unavoidable

accidents of life, but the perturbations of the mind. These are so set by the nature of man and of things that the whole philosophic background must be reviewed to know how they may be removed: in no way other than by understanding the nature of things could one know that the endeavor by which the mind asserts the continued existence of the body, its endeavor to understand, and its endeavor to know God are not only precisely the same, but further, are the mind's one virtue and its one effort toward perfection. Man's perfection, his freedom, and his salvation are one; all three include only the precept to act as reason dictates, and reason's dictates are according to the rational principles on which the universe is set; no one of the three could be contrary to any other. It would be a little sardonic nevertheless if that were all, if this organizing of all the sciences that they may lead to one single end found no more illuminating theoretic pronouncements than that only the good is good, not pleasure, riches, or fame, that the beginning of virtue is self-interest, that our end in action should be so to act that our actions depend as largely as possible on ourselves alone, and that our only secure happiness is one which has its formal cause in our own mind. But there is more; not in the plan of social reform nor in the catalogue of the passions to which it is joined, but precisely in the depth of philosophic implication on which they are founded; virtue significantly is most complete when such things as these are understood best and most completely. Since there is this system which must lie behind Spinoza's conclusions to his moral problems, on even ethical grounds the fundamental unity of it deserves to have been restated and reëxamined, for this is the very knowledge of the union the mind has with all nature and therefore it not only contains the possibility and safeguard of that which is supremely good, but is itself the supreme good.

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